



AUDIO/VIDEO CONTROL RECEIVER

RECEPTOR DE CONTROL DE AUDIO/VÍDEO RECEPTOR DE COMANDO AUDIO/VÍDEO AV功率放大器(带收音)

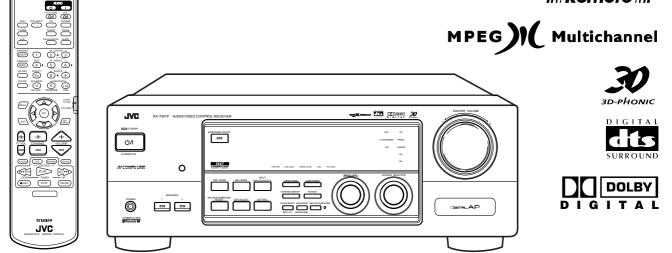


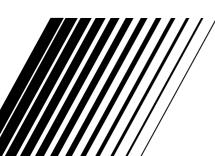




AV COMPU LINK

COMPU LINK IIII Remote IIII





INSTRUCTIONS

MANUAL DE INSTRUCCIONES INSTRUÇÕES 使用说明书 For Customer Use:

Enter below the Model No. and Serial No. which are located either on the rear, bottom or side of the cabinet. Retain this information for future reference.

Model No.

Serial No.

Warnings, Cautions and Others / Avisos, precauciones y otras notas / Advertêcias, precauções e outras notas / 警告,注意及其他须知事项

تحذيرات، تنبيهات وأشياء أخرى

CAUTION

To reduce the risk of electrical shocks, fire, etc.:

- 1. Do not remove screws, covers or cabinet.
- 2. Do not expose this appliance to rain or moisture.

PRECAUCIÓN

Para reducir riesgos de choques eléctricos, incendio, etc.:

- 1. No extraiga los tornillos, los cubiertas ni la caja.
- 2. No exponga este aparato a la lluvia o a la humedad.

ATENÇÃO

Para reduzir riscos de choques eléctricos, incêndio, etc.:

- 1. Não retire parafusos nem desmonte as tampas ou o gabinete.
- 2. Não exponha este aparelho à chuva nem à umidade.

警告

为了减低触电,火灾等危险:

- 1. 请勿擅自卸下螺丝钉,盖子或机壳。
- 2. 切勿让本机受雨淋或置潮湿环境中。

تحذير

لتجنب خطر الحريق، الصدمات الكهربائية، الخ .:

- لا تقم بفك البراغي، الاغطية أو الخزانة.
- لا تقم بتعريض هذا الجهاز للمطر أو للرطوبة.

Caution --- STANDBY/ON U/| switch!

Disconnect the mains plug to shut the power off completely. The STANDBY/ON $\bigcirc/|$ switch in any position does not disconnect the mains line. The power can be remote controlled.

Precaución — Interruptor STANDBY/ON U/!!

Desconectar el cable de alimentación para desactivar la alimentación totalmente. Cualquier que sea la posición de ajuste del interruptor STANDBY/ON ()/I, la alimentación no es cortada completamente. La alimentación puede ser controlada remotamente.

Precaução — Interruptor STANDBY/ON U/!!

Desconectar o cabo de alimentação para desligar a alimentação por completo. Qualquer que seja a posição de ajuste do interruptor STANDBY/ON ()/I, a alimentação não é completamente cortada. A alimentação pode ser controlada remotamente.

注意一 心/ 一开关!

无论 **U/I** 开关在任何位置,电源线的电源还是没有被切断, 若要将电源完全关闭,应把电源插头拔离插座。电源开关可 用遥控器控制。

تحذير – ٥/ الطاقة

انزع قابس الطاقة الكهربائية من اجل فصل الطاقة الكهربائية عن الجهاز كليا. لا يفصل مفتاح الطاقة الكهربائية عندما يكون باي وضع 10 الطاقة الكهربائية عن الجهاز . يمكن التحكم عن بعد بالطاقة الكهربائية.

Caution: Proper Ventilation

To avoide risk of electric shock and fire and to protect from damage.

Locale the a	pparatus as follows.
Front:	No obstructions open spacing.
Sides:	No obstructions in 10 cm from the sides.
Top:	No obstructions in 10 cm from the top.
Back:	No obstructions in 15 cm from the back
Bottom:	No obstructions, place on the level surface.
1 1 1 1 1	

In addition, maintain the best possible air circulation as illustrated.

Precaución: Ventilación Adecuada

Para evitar el riesgo de choque eléctrico e incendio y para proteger el aparato contra daños.

Ubique el aparato de la siguiente manera:

- Frente: Espacio abierto sin obstrucciones
- Lados: 10 cm sin obstrucciones a los lados
- Parte superior: 10 cm sin obstrucciones en la parte superior
- Parte trasera: 15 cm sin obstrucciones en la parte trasera
- Fondo: Sin obstrucciones, colóquelo sobre una superficie nivelada

Además, mantenga la mejor circulación de aire posible como se ilustra.

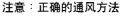
Precaução: ventilação apropriada

Para prevenir o risco de choque elétrico ou incêndio e para proteger o aparelho contra danos.

Localize-o da seguinte maneira:

- Frente: Espaço aberto, sem obstruções
- Lados: Espaço de 10 cm sem obstruções nos lados
- Topo: Espaço de 10 cm sem obstruções acima
- Atrás: Espaço de 15 cm sem obstruções atrás
- Parte inferior: Sem obstruções. Coloque o aparelho em superfície nivelada.

Mantenha, além disso, a maior circulação de ar possível, como indica a ilustração.



为了防止触电、火灾以及避免损坏,

按如下要求放置机器:

- 前面: 留下空间不要放置障碍物。
- 侧面: 侧面的 10cm 之内不要放置障碍物。
- 上面: 上面的 10cm 之内不要放置障碍物。
- 背面: 背面的 15cm 之内不要放置障碍物。
- 底部: 不要放置障碍物、水平放置,
- 此外、如图所示,尽可能保持最佳的空气循环。

الصحيحة	التهوية	حول	تنبيه:

لتفادي وقوع الصدمة الكهربائية والحريق، ولحماية الاجهزة من التلف قم بتحديد مواقع تركيب

	الاجهزة كالتالي:
مساحة فارغة بدون عوائق	الامام:
عدم وجود اية عوائق بطول ١٠ سم من الجوانب	الجوانب:
عدم وجود اية عوائق بطول ١٠ سم من السطح العلوي	السبطح العلوي:
عدم وجود اية عوائق بطول ١٥ سم من اللوحة الخلفية	الخلف:
عدم وجود اية عوائق، يجب وضع الاجهزة على السطح المستوى.	القاع:
احتفظ بأفضل توريع للهواء كما هو مبين في الرسم.	بالاضافة الى ذلك،

Español

English

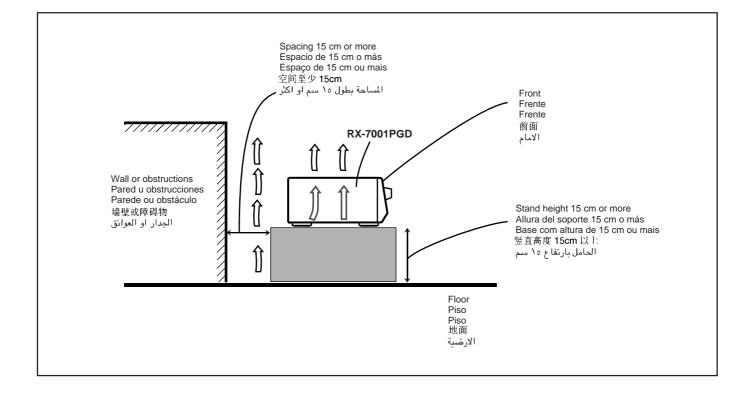


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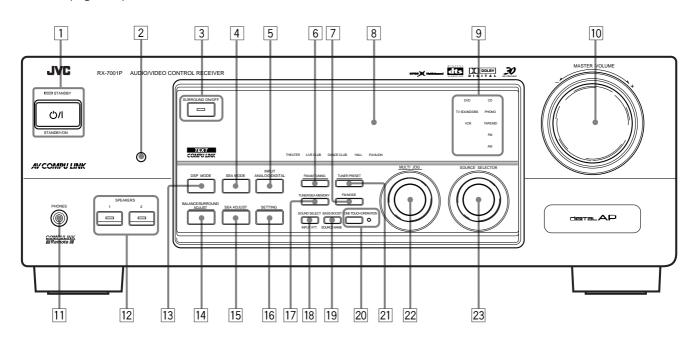
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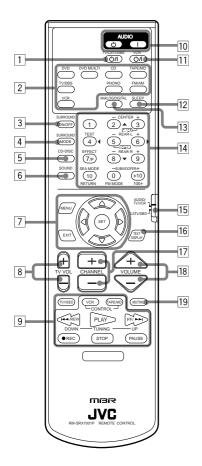
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Troubleshooting
Specifications

English

Parts Identification

Become familiar with the buttons and controls on the receiver before use. Refer to the pages in parentheses for details.





Remote Control

- 1 TV/CATV/DBS **(b)**/1 button (45, 46)
- Source selecting buttons (10)
 DVD, DVD MULTI, CD, TAPE/MD, TV/DBS, PHONO, FM/AM, VCR
- 3 SURROUND ON/OFF button (25, 27)
- 4 SURROUND MODE button (25, 26)
- 5 CD-DISC button (44)
- 6 SOUND button (20, 24, 29)
- Image: On-screen operation buttons (30, 37)MENU, SET, EXIT, \triangle , \bigtriangledown , \triangleleft , \triangleright
- 8 TV VOL +/- buttons (45, 46)
- Operating buttons for audio/video components (43 - 47)
- 10 AUDIO buttons (), | (10)
- 11 VCR (')/| button (45, 47)
- 12 SLEEP button (17)
- 13 ANALOG/DIGITAL button (16)
- 14 10 keys for selecting preset channels (19)
 - 10 keys for adjusting sound (20, 24 27, 29)
 - 10 keys for operating audio/video components (43 47)
- 15 Remote control mode selector (10, 43, 46)
- 16 TEXT DISPLAY button (37)
- 17 CHANNEL +/- buttons (45 47)
- 18 VOLUME +/- buttons (11)
- 19 MUTING button (12)

Front Panel

- 1 STANDBY/ON ()/| button and STANDBY lamp (10)
- 2 Remote sensor (9)
- 3 SURROUND ON/OFF button and lamp (26, 27)
- 4 SEA MODE button (20)
- 5 INPUT ANALOG/DIGITAL button (16)
- 6 FM/AM TUNING button (18)*
- 7 FM MODE button (19)
- 8 Display (10)
- 9 Source lamps (10)
- 10 MASTER VOLUME control (11)
- 11 PHONES jack (12)
- 12 SPEAKERS 1/2 buttons and lamps (11)
- 13 DSP MODE button (24)
- II BALANCE/SURROUND ADJUST button (12, 13, 24)*
- 15 SEA ADJUST button (20)*
- 16 SETTING button (14 17)*
- 17 TUNER/SEA MEMORY button (18 20)
- Is
 SOUND SELECT/INPUT ATT. button

 (11, 12)
- BASS BOOST/SOURCE NAME button (12, 13)
- 20 ONE TOUCH OPERATION button and lamp (17)
- 21 TUNER PRESET button (19)*
- 22 MULTI JOG control What this control actually does depends on which function you are trying to adjust. Before using this control, select the function by pressing one of the buttons marked with *.
- 23 SOURCE SELECTOR control (10)

Getting Started

• Be sure your hands are dry.

Before Installation

- Turn the power off to all components.
- Read the manuals supplied with the components you are going to connect.

Locations

power supply.

General

- Install the receiver in a location that is level and protected from moisture.
- The temperature around the receiver must be between $-5^{\circ}C$ and $35^{\circ}C$ (23°F and 95°F).
- Make sure there is good ventilation around the receiver. Poor ventilation could cause overheating and damage the receiver.

Handling the receiver

- Do not insert any metal object into the receiver.
- Do not disassemble the receiver or remove screws, covers, or cabinet.
- Do not expose the receiver to rain or moisture.

Checking the Supplied Accessories

Check to be sure you have all of the following items, which are supplied with the receiver.

The number in the parentheses indicates quantity of the pieces supplied.

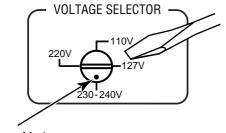
- Remote Control (1)
- Batteries (2)
- AM Loop Antenna (1)
- FM Antenna (1)
- AC Plug Adaptor (1)

If anything is missing, contact your dealer immediately.

Setting the Voltage Selector Switch

Before connections, always do the following first if necessary.

Set the correct voltage for your area with the voltage selector switch on the rear panel. Use a screw driver to rotate the switch so the number the arrow is pointing at is the same as the voltage where you are plugging in the receiver.

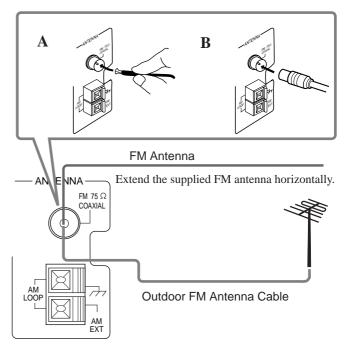


Voltage Mark

Connecting the FM and AM Antennas

FM Antenna Connections

This section explains how to connect audio/video components and speakers to the receiver, and how to connect the



A. Using the Supplied FM Antenna

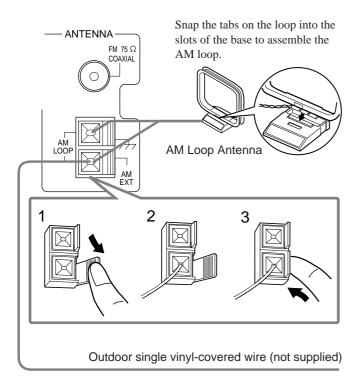
The FM antenna provided can be connected to the FM 75 Ω COAXIAL terminal as temporary measure.

B. Using the Standard Type Connector (Not Supplied) A standard type connector should be connected to the FM 75 Ω COAXIAL terminal.

Note:

If reception is poor, connect the outdoor antenna. Before attaching a 75 Ω coaxial cable (the kind with a round wire going to an outdoor antenna), disconnect the supplied FM antenna.

AM Antenna Connections



Turn the loop until you have the best reception.

Notes:

- Make sure the antenna conductors do not touch any other terminals, connecting cords and power cord. This could cause poor reception.
- If reception is poor, connect an outdoor single vinyl-covered wire to the AM EXT terminal. (Keep the AM loop antenna connected.)

Connecting the Speakers

You can connect the following speakers:

- Two pairs of front speakers to produce normal stereo sound.
- One pair of rear speakers to enjoy the surround effect.
- One center speaker to produce more effective surround effect (to emphasize human voices).
- One subwoofer to enhance the bass.

IMPORTANT:

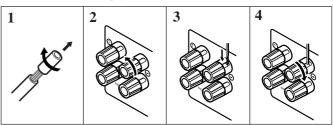
After connecting the speakers listed above, set the speaker setting information properly to obtain the best possible DSP effect. For details, see page 14.

For each speaker (except for a subwoofer), connect the (-) and (+) terminals on the rear panel to the (-) and (+) terminals marked on the speakers. For connecting a subwoofer, see page 5.

CAUTION:

Use speakers with the SPEAKER IMPEDANCE indicated by the speaker terminals.

Basic connecting procedure

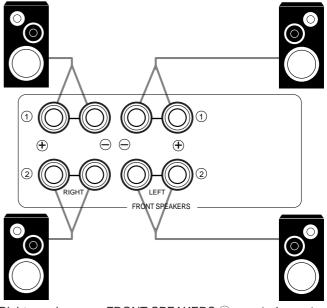


- 1 Cut, twist and remove the insulation at the end of each speaker signal cable (not supplied).
- 2 Turn the knob counterclockwise.
- 3 Insert the speaker signal cable.
- 4 Turn the knob clockwise.

Connecting the front speakers

You can connect two pairs of front speakers (one pair to the FRONT SPEAKERS ① terminals, and another pair to the FRONT SPEAKERS ② terminals).

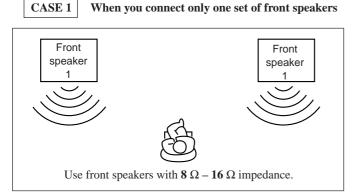
Right speaker ----- FRONT SPEAKERS 1 ----- Left speaker

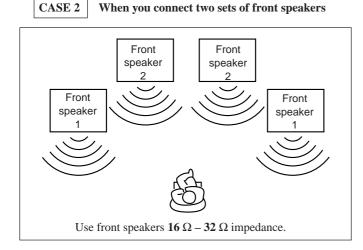


Right speaker ---- FRONT SPEAKERS 2 ---- Left speaker

About the speaker impedance

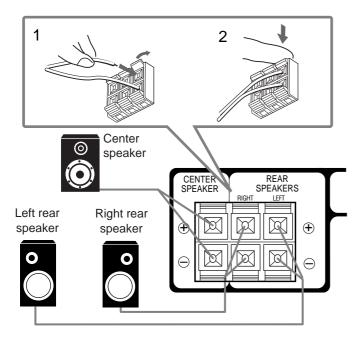
The required speaker impedance of the front speakers does differ depending on whether both the FRONT SPEAKERS (1) and FRONT SPEAKERS (2) terminals are used or only one of them is used.





Connecting the rear and center speakers

Connect rear speakers to the REAR SPEAKERS terminals and a center speaker to the CENTER SPEAKER terminals.



Connecting the subwoofer speaker

You can enhance the bass by connecting a subwoofer. Connect the input jack of a powered subwoofer to the SUBWOOFER OUT jack on the rear panel, using a cable with RCA pin plugs (not supplied).



Powered subwoofer

Connecting Audio/Video Components

You can connect the following audio/video components to this receiver. Refer also to the manuals supplied with your components.

Audio Components	Video Components
• Turntable	 DVD player*
• CD player*	• TV*
Cassette deck	• DBS tuner*
or MD recorder*	• VCR

You can connect these components using the methods described in "Analog connections" (below) or in "Digital connections" (see page 8).

Analog connections

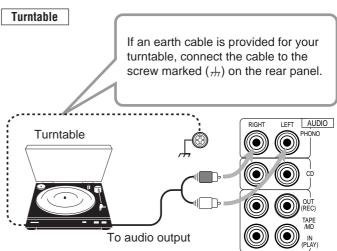
Audio component connections

Use the cables with RCA pin plugs (not supplied).

Connect the white plug to the audio left jack, and the red plug to the audio right jack.

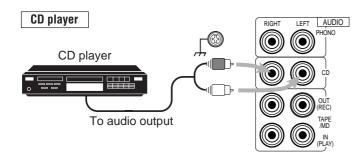
CAUTION:

If you connect a sound-enhancing device such as a graphic equalizer between the source components and this receiver, the sound output through this receiver may be distorted.

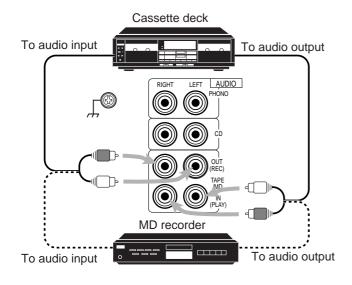


Note:

Any turntables incorporating a small-output cartridge such as an MC (moving-coil) type must be connected to this receiver through a commercial head amplifier or step-up transformer. Direct connection may result in insufficient volume.



Cassette deck or MD recorder



Note:

You can connect either a cassette deck or an MD recorder to the TAPE/MD jacks. When connecting an MD recorder to the TAPE/MD jacks, change the source name, which will be shown on the display when selected as the source, to "MD." See page 13 for details.

If your audio components have a COMPU LINK-3 or TEXT COMPU LINK jack

- See also page 35 for detailed information about the connection and the COMPU LINK-3 remote control system.
- See also page 36 for detailed information about the connection and the TEXT COMPU LINK remote control system.

Video component connections

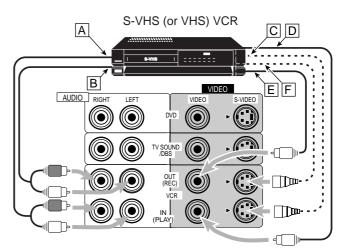
Use the cables with RCA pin plugs (not supplied). Connect the white plug to the audio left jack, the red plug to the audio right jack, and the yellow plug to the video jack. If your video components have S-video (Y/C-separation) terminals, connect them using S-video cables (not supplied). Connecting these video components through the S-video input/output terminals will give you better picture playback (or recording) quality.

IMPORTANT:

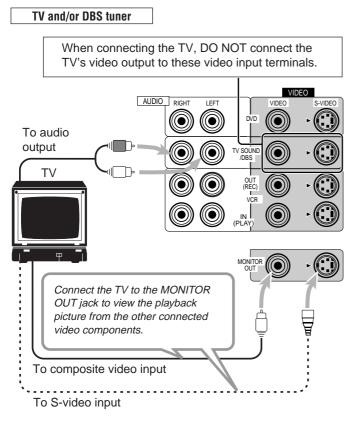
This receiver is equipped with both the composite video and S-video input/output terminals for connecting video components. You do not have to connect both the composite video and S-video terminals.

However, remember that the video signals from the composite video input terminals are output only through the composite video output terminals, while the ones from the S-video input terminals are output only through the S-video output terminals. Therefore, if a recording video component and a playing video component are connected to the receiver through the different video terminals, you cannot record the picture from the playing component on the recording component. In addition, if the TV and a playing video component are connected to the receiver through the different video terminals, you cannot view the playback picture from the playing component on the TV.



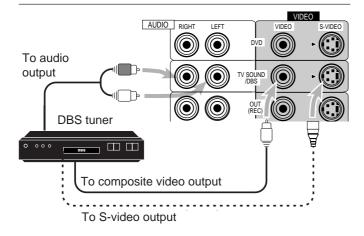


- A To left/right channel audio output
- B To left/right channel audio input
- C To S-video output
- D To composite video output
- E To composite video input
- F To S-video input



Note:

Use a TV of the PAL- or multi-color system.

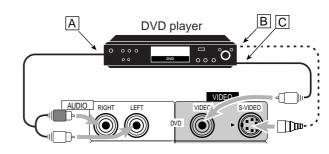


Note:

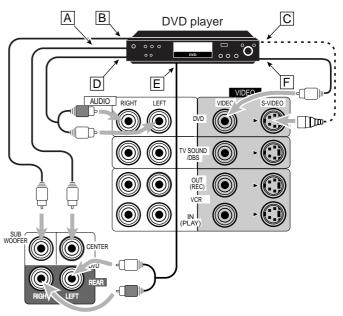
When connecting the DBS tuner to the TV SOUND/DBS jacks, change the source name, which will be shown on the display when selected as the source, to "DBS." See page 13 for details.

DVD player

• When you connect the DVD player with stereo output jacks:



- A To front left/right channel audio output (or to audio mixed output if necessary)
- B To S-video output
- C To composite video output
- When you connect the DVD player with its analog discrete output (5.1 CH reproduction) jacks:



- A To center channel audio output
- B To subwoofer audio output
- C To S-video output
- D To front left/right channel audio output
- E To rear left/right channel audio output
- F To composite video output

Digital connections

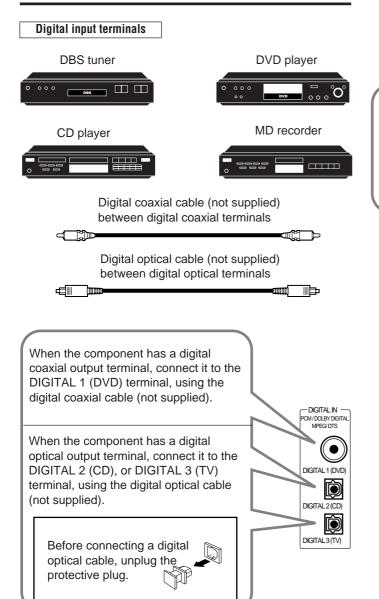
This receiver is equipped with three DIGITAL IN terminals — one digital coaxial terminal and two digital optical terminals, and one DIGITAL OUT terminal.

You can connect any digital equipment such as ----

- DBS tuner,
- Digital TV broadcast tuner,
- DVD player,
- CD player,
- and MD recorder.

IMPORTANT:

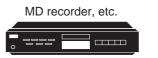
- When connecting the DVD player, digital TV broadcast tuner or DBS tuner using the digital terminals, you also need to connect it to the video jack (either composite video terminal or S-video terminal) on the rear. Without connecting it to the video jack, you can view no playback picture.
- After connecting the components using the DIGITAL IN terminals, set the following correctly if necessary.
- Set the digital input (DIGITAL IN) terminal setting correctly. For details, see "Digital Input (DIGITAL IN) Terminal Setting" on page 16.
- Select the digital input mode correctly. For details, see "Selecting the Analog or Digital Input Mode" on page 16.

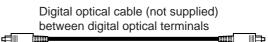


Notes:

- When shipped from the factory, the DIGITAL IN terminals have been set for use with the following components.
- DIGITAL 1 (coaxial): For DVD player
- DIGITAL 2 (optical): For CD player
- DIGITAL 3 (optical): For digital TV broadcast tuner
- When you want to operate the CD player or MD recorder using the COMPU LINK remote control system, connect the target component also as described in "Analog connections" (see pages 5 and 6).
- When you want to operate the DVD player using the AV COMPU LINK remote control system, connect the DVD player also as described in "Analog connections" (see page 7).

Digital output terminal





When the digital recording equipment such as an MD recorder has a digital optical input terminal, connecting it to the DIGITAL OUT terminal enables you to perform digital-to-digital recording.



Connecting the Power Cord

Before plugging the receiver into an AC outlet, make sure that all connections have been made.

Plug the power cord into an AC outlet.

Keep the power cord away from the connecting cables and the antenna. The power cord may cause noise or screen interference. We recommend that you use a coaxial cable to connect the antenna, since it is well-shielded against interference.

Notes:

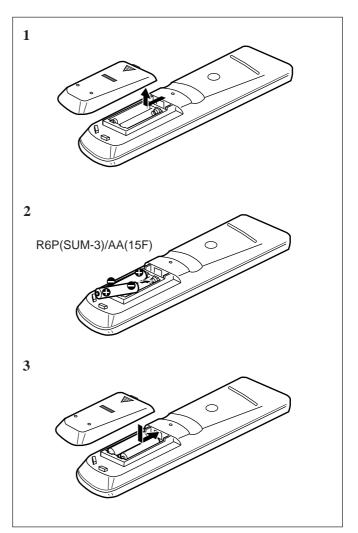
- The preset settings such as preset channels and sound adjustment may be erased in a few days in the following cases:
 When you unplug the power cord.
 - -When a power failure occurs.
- If the wall outlet does not match the AC plug, use the supplied AC plug adaptor.

CAUTIONS:

- Do not plug in before setting the voltage selector switch on the rear of the unit and all connection procedures are complete.
- Do not touch the power cord with wet hands.
- Do not pull on the power cord to unplug the cord. When unplugging the cord, always grasp the plug so as not to damage the cord.

Putting Batteries in the Remote Control

Before using the remote control, put two supplied batteries first. When using the remote control, aim the remote control directly at the remote sensor on the receiver.



- **1.** On the back of the remote control, remove the battery cover.
- 2. Insert batteries. Make sure to match the polarity: (+) to (+).

3. Replace the cover.

If the range or effectiveness of the remote control decreases, replace the batteries. Use two R6P(SUM-3)/AA(15F) type dry-cell batteries.

CAUTION:

Follow these precautions to avoid leaking or cracking cells:

- Place batteries in the remote control so they match the polarity:
 (+) to (+).
- Use the correct type of batteries. Batteries that look similar may differ in voltage.
- Always replace both batteries at the same time.
- Do not expose batteries to heat or flame.

Basic Operations

The following operations are commonly used when you play any sound source.

IMPORTANT:

When using the remote control, check to see if its remote control mode selector is set to the correct position:

To operate this receiver, set it to "AUDIO/TV/ VCR."

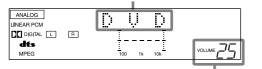
Turning the Power On and Off (Standby)

On the front panel:

To turn on the power, press STANDBY/ON ()/|. The STANDBY lamp goes off. The name of the current source (or station frequency) appears on the display.



Current source name appears



Current volume level is shown here

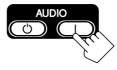
To turn off the power (into standby mode),

press STANDBY/ON (ل) again. The STANDBY lamp lights up. A small amount of power is consumed in standby mode. To turn the power off completely, unplug the AC power cord.



From the remote control:

To turn on the power, press AUDIO 1. The STANDBY lamp goes off. The name of the current source (or station frequency) appears on the display.



To turn off the power (into standby mode), press AUDIO (). The STANDBY

DVD

TV SOUND/D

VCR

PHONO

FM

AM

Selecting the Source to Play

On the front panel:

lamp lights up.

Turn SOURCE SELECTOR until the source name you want appears on the display.

• As you turn the selector, the source changes as follows:

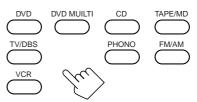
$CD \sqsubset PHONO \sqsubset TAPE (or MD) \sqsubset FM \sqsubset$
AM \square DVD \square DVD MULTI \square
TV SOUND (or DBS) \square VCR \square
(back to the beginning)

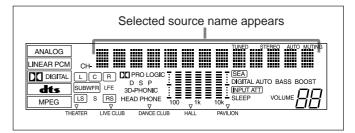
The selected source lamp also lights up.

• The DVD lamp lights up both for "DVD" and "DVD MULTI."

From the remote control:

Press one of the source selecting buttons.





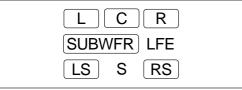
DVD	Select the DVD player.
DVD MULTI	Select the DVD player for viewing the digital video
	disc using the analog discrete output mode (5.1CH
	reproduction) on the DVD player.
	To enjoy the DVD MULTI playback, see page 29.
CD*	Select the CD player.
TAPE/MD*	Select the cassette deck (or the MD recorder).
TV/DBS	Select TV sounds (or the DBS tuner).
PHONO*	Select the turntable.
FM/AM*	Select an FM or AM broadcast.
	• Each time you press the button, the band alternates
	between FM and AM.
VCR	Select the video component connected to the VCR
	jacks.

Notes:

- When connecting an MD recorder (to the TAPE/MD jacks), and a DBS tuner (to the TV SOUND/DBS jacks), change the source name shown on the display. For details, see page 13.
- When you press one of the source selecting buttons on the remote control marked above with an asterisk (*), the receiver automatically turns on.

Signal and speaker indicators on the display

- The signal indicators light up to indicate the incoming channel signals.
- Only the indicators for the incoming signals light up.
- The frame of the signal indicator (except for "LFE" and "S") lights up if the corresponding speaker is set to "LARGE" or "SMALL" (for subwoofer, "YES").
 - The frames of "L" and "R" indicators always light up.



- L: • When digital input is selected: Lights up when the left channel signal comes in.
 - When analog input is selected: Always lights up.
 - When digital input is selected: Lights up when the right channel signal comes in.
 - When analog input is selected: Always lights up.
- C: Lights up when the center channel signal comes in.
- LS: Lights up when the left rear channel signal comes in.
- RS: Lights up when the right rear channel signal comes in.
- S: Lights up when the monaural rear channel signal comes in.
- LFE: Lights up when the LFE channel signal comes in.

Notes:

R:

- When "SUBWOOFER" is set to "YES," SUBWFR lights up.
- When you select "DVD MULTI," all the signal indicators except "S" light up.

Selecting different sources for picture and sound

You can watch picture from a video component while listening to sound from another component.

On the front panel:

1. Press SOUND SELECT (INPUT ATT.) briefly while viewing the picture from a video component such as the VCR or DVD player, etc.



"SOUND SELECT" appears on the display.

2. Turn SOURCE SELECTOR to select the sound (except the TV sound), while the indication of the above step is still on the display.

From the remote control:

Press one of the audio source selecting buttons (CD, TAPE/MD, PHONO, FM/AM, TV/DBS*), while viewing the picture from a video component such as the VCR or DVD player, etc.

Notes:

- Once you have selected a video source, pictures of the selected source are sent to the TV until you select another video source.
- The TV/DBS button only works for selecting "DBS" as the source but not for selecting "TV SOUND." When you use the DBS tuner, change the source name correctly (see page 13).

Adjusting the Volume

On the <u>front panel:</u>

To increase the volume, turn MASTER VOLUME clockwise.

To decrease the volume, turn it

- counterclockwise.
- When you turn MASTER VOLUME rapidly, the volume level also changes rapidly.
- When you turn MASTER VOLUME slowly, the volume level also changes slowly.

From the remote control:

To increase the volume, press VOLUME +. To decrease the volume, press VOLUME -.

CAUTION:

Always set the volume to the minimum before starting any source. If the volume is set at its high level, the sudden blast of sound energy can permanently damage your hearing and/or ruin your speakers.

Note:

The volume level can be adjusted within the range of "0" (minimum) to "90" (maximum).

Selecting the Front Speakers

On the front panel ONLY:

When you have connected two pairs of the front speakers, you can select which to use.

Press SPEAKERS 1 or SPEAKERS 2 to select the speaker to use.

• Each time you press the button, the lamp on the respective button turns on and off. When the lamp on either button lights up, the respective speakers are activated.



Note:

If you use any of the DSP modes other than the 3D-PHONIC modes with both front speakers activated, the speakers connected to the FRONT SPEAKERS 2 terminals are deactivated.



/OLUME

Listening only with headphones

You can listen with the headphones without deactivating both pairs of speakers; however, if you want to use the HEADPHONE mode (see below), you must turn off both pairs of speakers.

- 1. Connect a pair of headphones to the PHONES jack on the front panel.
- 2. Press SPEAKERS 1 and/or 2 so that no lamps on the buttons are turned on.

This cancels the surround mode or DSP mode currently selected, and activates the HEADPHONE mode (see below).

• The HEAD PHONE indicator lights up on the display.

HEADPHONE mode:

This mode can reproduce the LFE channel signals, mixing them with the front channel signals. So you will not miss the subwoofer sounds even if you listen to a source using the headphones.

Notes:

- While in the HEADPHONE mode, you cannot use any other DSP modes (see page 21.)
- Activating the speaker cancels the headphones mode and turns on the DSP mode previously selected.

CAUTION:

Be sure to turn down the volume before connecting or putting on headphones, as high volume can damage both the headphones and your hearing.

Muting the Sound

From the remote control ONLY:

Press MUTING to mute the sound through all speakers and headphones connected.



BASS BOOST

"MUTING" appears on the display and the volume turns off (the volume level indicator goes off).

To restore the sound, press MUTING again so that "OFF" appears on the display.

• Turning MASTER VOLUME on the front panel or pressing VOLUME +/- on the remote control also restores the sound.

Reinforcing the Bass

You can boost the bass level.

On the front panel ONLY:

Press BASS BOOST (SOURCE NAME) briefly to select the bass boost function.

- Each time you press the button, the bass boost function turns on ("BASSBOOST ON") and off ("BASSBOOST OFF").
 - Select "BASSBOOST ON" to activate the bass boost function. The BASS BOOST indicator lights up on the display.
 - Select "BASSBOOST OFF" to cancel it. The indicator goes off.

Note:

This function affects the front speaker sounds only.

Attenuating the Input Signal

When the input level of the playing source is too high, the sounds will be distorted. If this happens, you need to attenuate the input signal level to prevent the sound distortion.

On the front panel ONLY:

Press and hold INPUT ATT. (SOUND SELECT) so that the ATT indicator lights up on the display.



• Each time you press and hold the button, the Input Attenuator mode turns on ("INPUT ATT ON") or off ("INPUT NORMAL").

Notes:

- This function is available only for the sources connected using the analog terminals.
- This function takes effect when the DSP mode is in use.
- When selecting "DVD MULTI" as the source, this effect does not work.

Adjusting the Subwoofer Output Level

You can adjust the subwoofer output level if you have selected "YES" for the "SUBWOOFER" (see page 14). Once it has been adjusted, the receiver memorizes the adjustment.

Before you start, remember....

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.
- When the front speakers are all deactivated, the subwoofer level cannot be adjusted.

On the front panel:

1. Press (BALANCE/) SURROUND ADJUST repeatedly until "SUBWFR LEVEL" appears on the display. The display changes to show the current setting.

BALANCE SURROUND ADJUST

2. Turn MULTI JOG to adjust the subwoofer output level (-10 dB to +10 dB).

From the remote control:

- **1. Press SOUND.** The 10 keys are activated for sound adjustments.
- 2. Press SUBWOOFER -/+ to adjust the subwoofer output level (-10 dB to +10 dB).







Basic Settings

Some of the following settings are required after connecting and positioning your speakers in your listening room, while others will make operations easier.

IMPORTANT:

When using the remote control, check to see if its remote control mode selector is set to the correct position: **To operate this receiver,** set it to "AUDIO/TV/VCR."



Recording a Source

For analog-to-analog recording

You can record any analog source through the receiver to —

- the cassette deck (or MD recorder) connected to the TAPE/MD jacks, and
- the VCR connected to the VCR jacks
- at the same time.

For digital-to-digital recording

You can record the currently selected digital input through the receiver to a digital recording device connected to the DIGITAL OUT terminal.

Notes:

- Analog-to-digital and digital-to-analog recordings are not possible.
- The output volume level, bass boost (see page 12), SEA modes (see page 20), and DSP modes (see page 21) cannot affect the recording.
- The test tone signal (see page 25, 26) does not come out through the DIGITAL OUT terminal.

Adjusting the Front Speaker Output Balance

If the sounds you hear from the front right and left speakers are unequal, you can adjust the speaker output balance.

Before you start, remember...

• There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

On the front panel ONLY:

1. Press BALANCE (/SURROUND) ADJUST repeatedly until "L/R BALANCE" appears on the display.



The display changes to show the current setting.

- 2. Turn MULTI JOG to adjust the balance.
 - Turning it clockwise decreases the left channel output.
 - Turning it counterclockwise decreases the right channel output.

Changing the Source Name

When you have connected an MD recorder to the TAPE/MD jacks or the DBS tuner to the TV SOUND/DBS jacks on the rear panel, change the source name which will be shown on the display when you select the MD recorder or DBS tuner as the source.

On the front panel ONLY:

- 1. When changing the source name from "TAPE" to "MD":
 - Turn SOURCE SELECTOR until "TAPE" appears.



- When changing the source name from "TV SOUND" to "DBS":
- Turn SOURCE SELECTOR until "TV SOUND" appears.
- 2. Press and hold SOURCE NAME (BASS BOOST) until "ASSGN. MD" or "ASSGN. DBS" appears on the display.



To change the source name to "TAPE" or "TV SOUND," repeat the same procedure above — in step 1, select "MD" or "DBS" then press and hold SOURCE NAME (BASS BOOST).

Note:

Without changing the source name, you can still use the connected components. However, there may be some inconvenience.

- "TAPE" or "TV SOUND" will appear on the display when you select the MD recorder or DBS tuner.
- You cannot use the digital input (see page 16) for the MD recorder.
- You cannot use the COMPU LINK remote control system (see page 35) to operate the MD recorder.



Setting the Subwoofer Information

Register whether or not you have connected a subwoofer.

Before you start, remember...

• There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

On the front panel ONLY:

1. Press SETTING repeatedly until "SUBWOOFER" appears on the display.



The display changes to show the current setting.

- 2. Turn MULTI JOG to register whether you have connected a subwoofer or not.
 - As you turn it, the subwoofer setting alternates between "YES" and "NO."

YES:	Select this when a subwoofer is used. (SUBWFR) lights up on the display (see page 11).
NO:	Select this when no subwoofer is used.

Setting the Speakers for the DSP Modes

To obtain the best possible surround sound of the DSP modes, you have to register the information about the speakers arrangement after all connections are completed.

Before you start, remember...

• There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

Front, Center, and Rear Speaker Setting

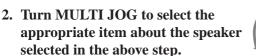
Register the sizes of all the connected speakers.

• When you change your speakers, you need to register the information about the speakers again.

On the front panel ONLY:

1. Press SETTING repeatedly until "FRONT SPK" (Front Speaker), "CENTER SPK" (Center Speaker) or "REAR SPK" (Rear Speaker) appears on the display. The display changes to show the current setting.







• As you turn it, the display changes to show the following:

►LARGE ←→ SMALL ←→ NONE ←

LARGE: Select this when the speaker size is relatively large.

SMALL: Select this when the speaker size is relatively small.

NONE: Select this when you have not connected a speaker. (Not selectable for the front speakers.)

3. Repeat steps 1 and 2 to select the appropriate items for the other speakers.

Notes:

- Keep the following comment in mind as reference when adjusting.
 If the size of the cone speaker unit built in your speaker is greater than 12 cm, select "LARGE," and if it is smaller than 12 cm, select "SMALL."
- If you have selected "NO" for the subwoofer setting, you can only select "LARGE" for the front speaker setting.
- If you have selected "SMALL" for the front speaker setting, you cannot select "LARGE" for the center and rear speaker settings.

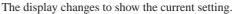
Center Delay Time Setting

Register the delay time of the sound from the center speaker, comparing to that of the sound from the front speakers. If the distance from your listening point to the center speaker is equal to that to the front speakers, select 0 msec. As the distance to the center speaker becomes shorter, increase the delay time.

- 1 msec increase (or decrease) in delay time corresponds to 30 cm decrease (or increase) in distance.
- When shipped from the factory, delay time is set to 0 msec.

On the front panel ONLY:

1. Press SETTING repeatedly until "CENTER DELAY" appears on the display.



2. Turn MULTI JOG to select the delay time of the center speaker



SETTING

- Turn it clockwise to increase the delay time from 0 msec ("C. DELAY: 0ms") to 5 msec ("C. DELAY: 5ms").
- Turn it counterclockwise to decrease the delay time from 5 msec ("C. DELAY: 5ms") to 0 msec ("C. DELAY: 0ms").

Notes:

- Center delay time setting is not valid for the DVD MULTI playback mode.
- You cannot adjust the center delay time when you have set "CENTER SPK" to "NONE."

Rear Delay Time Setting

Register the delay time of the sound from the rear speakers, comparing to that of the sound from the front speakers. If the distance from your listening point to the rear speakers is equal to that to the front speakers, select 0 msec. As the distance to the rear speakers becomes shorter, increase the delay time.

- 1 msec increase (or decrease) in delay time corresponds to 30 cm decrease (or increase) in distance.
- Rear delay time for Dolby Digital, DTS Digital Surround and MPEG Multichannel is to be set to 5 msec.
- When shipped from the factory, delay time is set to 5 msec.

On the front panel ONLY:

1. Press SETTING repeatedly until "REAR DELAY" appears on the display.



The display changes to show the current setting.

2. Turn MULTI JOG to select the delay time of the rear speaker output.



- Turn it clockwise to increase the delay time from 0 msec ("R. DELAY: 0ms") to 15 msec ("R. DELAY: 15ms").
- Turn it counterclockwise to decrease the delay time from 15 msec ("R. DELAY: 15ms") to 0 msec ("R. DELAY: 0ms").

Notes:

- Rear delay time setting is not valid for the DVD MULTI playback mode.
- You cannot adjust the rear delay time when you have set "REAR SPK" to "NONE."

Crossover Frequency Setting

Small speakers cannot reproduce the bass sound very well. So, if you have used a small speaker for any of the front, center, and rear channels, this receiver automatically reallocate the bass elements, originally assigned to the channel for which you have connected the small speaker, to another channel (for which you have connected the large speaker).

To use this function properly, you need to set the crossover

frequency level according to the size of the small speaker connected.If you have selected "LARGE" for all speakers (see page 14), this function is set to "OFF" and cannot be adjusted.

On the front panel ONLY:

1. Press SETTING repeatedly until "CROSSOVER FRQ" (Crossover Frequency) appears on the display. The display changes to show the current setting.



2. Turn MULTI JOG to select the crossover frequency level according to the size of the small speaker connected.



• As you turn it, the display changes to show the following:

 \rightarrow 80Hz \longleftrightarrow 100Hz \longleftrightarrow 120Hz \longleftarrow

80Hz:	Select this when the cone speaker unit built in the speaker is about 12 cm.
100Hz:	Select this when the cone speaker unit built in the speaker is about 10 cm.
120Hz:	Select this when the cone speaker unit built in the speaker is about 8 cm.

Note:

Crossover frequency setting is not valid for the DVD MULTI playback mode, 3D-PHONIC mode, and HEADPHONE mode.

Low Frequency Effect Attenuator Setting

If the bass sound is distorted while playing back a source using Dolby Digital, DTS Digital Surround or MPEG Multichannel follow the procedure below.

On the front panel ONLY:

1. Press SETTING repeatedly until "LFE ATT" (Low Frequency Effect Attenuator) appears on the display.



The display changes to show the current setting.

2. Turn MULTI JOG to select the low frequency effect attenuator level.

u the following:

As you turn it, the display changes to show the following:
 0dB ← 10dB

0dB:	Normally select this.			
10dB:	Select this when the bass sound is distorted.			

Note:

Low frequency effect attenuator setting is not valid for the DVD MULTI playback mode.

Dynamic Range Compression Setting

You can compress the dynamic range (difference between maximum sound and minimum sound) of the reproduced sound. This is useful when enjoying surround sound at night.

• This function takes effect only when playing back a source using Dolby Digital.

On the front panel ONLY:

1. Press SETTING repeatedly until "D. RANGE COMP." (Dynamic Range Compression) appears on the display.



The display changes to show the current setting.

2. Turn MULTI JOG to select the appropriate item about the compression level.



As you turn it, the display changes to show the following:
 → OFF ← → MID ← → MAX ← →

OFF:	Select this when you want to enjoy surround with its full dynamic range. (No effect applied.)
MID:	Select this when you want to reduce the dynamic range a little. (Factory setting.)
MAX:	Select this when you want to apply the compression effect fully. (Useful at night.)

Note:

Dynamic Range Compression setting is not valid for the DTS Digital Surround, MPEG Multichannel and DVD MULTI playback mode.

Digital Input (DIGITAL IN) Terminal Setting

When you use the digital input terminals, you have to register what components are connected to which terminals (DIGITAL IN 1/2/3).

Before you start, remember...

• There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

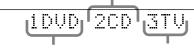
On the front panel ONLY:

1. Press SETTING repeatedly until "DIGITAL IN" appears on the display.



The display changes to show the current setting.

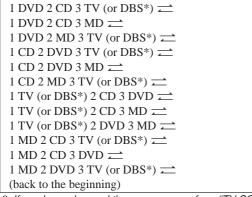
DIGITAL 2 terminal setting



DIGITAL 1 terminal setting DIGITAL 3 terminal setting

2. Turn MULTI JOG to select the appropriate digital terminal setting.

• As you turn it, the display changes to show the following:



If you have changed the source name from "TV SOUND" to "DBS," "DBS" appears.

Note:

When shipped from the factory, the DIGITAL IN terminals can be used as the digital input for the following components.

- DIGITAL 1 (coaxial): For DVD player
- DIGITAL 2 (optical): For CD player
- DIGITAL 3 (optical): For digital TV broadcast tuner

Selecting the Analog or Digital Input Mode

When you have connected some digital source components using the digital terminals (see page 8), you need to change the input mode for these components to the appropriate digital input mode correctly -AUTO/PCM, DOLBY DIGITAL, DTS, or MPEG.

Before you start, remember...

• The digital input (DIGITAL IN) terminal setting should be correctly done for the sources you want to select the digital input mode for. Without setting this digital input terminal correctly, you cannot change the input mode from analog input to digital input even if you follow the procedure below.

On the front panel:

1. Turn SOURCE SELECTOR until the source (CD, MD, TV SOUND, DBS, or DVD)* for which you want to change the input mode appears on the display.



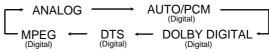
Note:

- Among the sources listed above, you can select the digital input only for the sources which you have selected the digital input terminals for. (See "Digital Input (DIGITAL IN) Terminal Setting.")
- 2. Press INPUT ANALOG/DIGITAL repeatedly until the digital input mode you want appears on the display.

ANALOG/DIGITAL

INPUT

· Each time you press the button, the input mode changes as follows:



Normally select "AUTO/PCM," so the receiver automatically detects the incoming digital signal format. (The DIGITAL AUTO indicator lights up on the display.)

- When the receiver can recognize the digital signal format coming into the receiver, the frame of the digital signal indicator for the detected signal lights up automatically.
- When the receiver cannot recognize the incoming signal format correctly, the frame of the digital signal indicator flashes.

If this happens, select the same digital input mode with the incoming digital signal - either "DOLBY DIGITAL", "DTS" or "MPEG."

To change the input mode back to analog input, select "ANALOG."

From the remote control:

1. Press the source selecting button ((CD, TAPE/MD, TV/DBS, or DVD)* for which you want to change the input mode.



- Among the sources listed above, you can select the digital input only for the sources which you have selected the digital input terminals for. (See "Digital Input (DIGITAL IN) Terminal Setting.")
- 2. Press ANALOG/DIGITAL to change the input mode.
- Each time you press the button, the input mode changes as follows:



Notes:

Note:

- Noise may come out of the speakers while searching or skipping a multi-sound source encoded with Dolby Digital, DTS Digital Surround or MPEG Multichannel. If this happens, select "DOLBY DIGITAL", "DTS" or "MPEG" for digital input mode.
- When you change the source, the digital input mode will be automatically reset to "AUTO/PCM."

Showing the Text Information on the Display

When you have connected an MD recorder or CD player equipped with TEXT COMPU LINK remote control system (see page 36), you can show the text information, such as disc title or track title, on the display of this receiver. To show it on the display, follow the procedure below.

Before you start, remember...

• There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

On the front panel ONLY:

1. Press SETTING repeatedly until "FL DISPLAY" appears on the display.



The display changes to show the current setting.

- 2. Turn MULTI JOG to select either the source name or the text information to be shown on the display.
 - As you turn it, the display changes to show the following:

→ TEXT NORMAL ←

NORMAL: Source name appears during play.

TEXT: Text information appears during play.

Note:

Though you have selected "TEXT," the source name such as "CD" or "MD" appears if a playing disc has no text information.

Setting the AM Tuner Interval Spacing

Some countries space AM stations 9 kHz apart, and other countries use 10 kHz spacing.

On the front panel ONLY:

To select the 10 kHz interval:

Be sure the receiver is turned off, but is plugged into an AC outlet. Hold down TUNER PRESET and press STANDBY/ON U/I. Now the 10 kHz interval is selected.





To change back to the 9 kHz interval:

Be sure the receiver is turned off, but is plugged into an AC outlet. Hold down FM MODE and press STANDBY/ON U/I. Now the 9 kHz interval is selected.

and





Storing the Basic Settings and Adjustments — One Touch Operation

JVC's One Touch Operation function is used to assign and store different sound settings for each different playing source. By using this function, you do not have to change the settings every time you change the source. The stored settings for the newly selected source are automatically recalled. The following can be stored for each source:

- Volume level (see page 11)
- Bass boost (see page 12)
- Input attenuator mode (see page 12)
- Subwoofer output level (see page 12)
- Balance (see page 13)
- SEA modes (see page 20)
- DSP modes
 - 3D-PHONIC mode settings (see page 24)
 - DAP mode settings (see page 24)
 - Surround mode settings (see page 25)
- DVD MULTI playback mode settings (see page 29)

On the front panel ONLY:

To store the sound settings

1. Press ONE TOUCH OPERATION. The ONE TOUCH OPERATION lamp lights up, then the previously memorized settings are recalled.



2. Adjust the sound using the functions listed above. The newly adjusted settings are memorized.

To recall the sound settings

With the ONE TOUCH OPERATION lamp lit, the settings for the currently selected source are recalled when the source is selected.

To cancel the One Touch Operation function

Press ONE TOUCH OPERATION so that the lamp goes off. (Even though the One Touch Operation function is canceled, the recalled sound effects remain active.)

Notes:

- If the source is FM or AM, you can assign a different setting for each band
- The DSP modes and DVD MULTI playback mode cannot be used at the same time.

Using the Sleep Timer

Using the Sleep Timer, you can fall asleep to music and know the receiver will turn off by itself rather than play all night.

From the remote control ONLY:

Press SLEEP repeatedly.

The SLEEP indicator lights up on the display, and the shut-off time changes as follows (in minutes):



SLEEP

 – 00 (Canceled) -When the shut-off time comes

The receiver turns off automatically.

To check or change the time remaining until the shut-off time Press SLEEP once.

- The remaining time until the shut-off time appears in minutes.
- To change the shut-off time, press SLEEP repeatedly.

To cancel the Sleep Timer

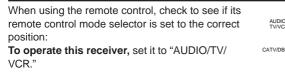
Press SLEEP repeatedly until "SLEEP 00min." appears on the display. (The SLEEP indicator goes off.)

• Turning off the power also cancels the Sleep Timer.

Receiving Radio Broadcasts

You can browse through all the stations or use the preset function to go immediately to a particular station.

IMPORTANT:



Tuning in Stations Manually

Before you start, remember...

• Check the AM tuner interval spacing (9 kHz or 10 kHz) for your area. (See page 17.)

On the front panel:

is tuned in.

1. Turn SOURCE SELECTOR to select the band (FM or AM). The last received station of the selected band



2. Press FM/AM TUNING.

3. Turn MULTI JOG until you find the frequency you want.

- · Turning it clockwise increases the frequency.
- · Turning it counterclockwise decreases the frequency.
- When you turn MULTI JOG quickly, the frequency keeps changing until a station is tuned in.

From the remote control:

- 1. Press FM/AM to select the band. · Each time you press the button, the band alternates between FM and AM.
- 2. Press TUNING UP or TUNING DOWN repeatedly until you find the frequency you want.
- TUNING TUNING
- When you hold the button (and release it), the frequency keeps changing until a station is tuned in.

Note:

When a station of sufficient signal strength is tuned in, the TUNED indicator lights up on the display.

When an FM stereo program is received, the STEREO indicator also lights up.

Using Preset Tuning

Once a station is assigned to a channel number, the station can be quickly tuned. You can preset up to 30 FM and 15 AM stations.

To store the preset stations

Before you start, remember...

• There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

On the front panel ONLY:

- 1. Tune in the station you want to preset (see "Tuning in Stations Manually").
 - If you want to store the FM reception mode for this station, select the FM reception mode you want. See "Selecting the FM Reception Mode" on page 19.

ANALOG LINEAR PCM		ΕM	8	7	:	TUNED STEREO
DIGITAL L	R		1		Ŧ	
dts			<u>i – –</u>		- 1	
MPEG			100	1k	10k	

2. Press TUNER (/SEA) MEMORY. "CH-" appears and the channel number

position starts flashing on the display for about 10 seconds.

TUNER/SEA MEMORY

	M	, E		"- -	TUNED STEREO
dts MPEG		100	1k	10k	

3. Turn MULTI JOG to select a channel number while the channel number position is flashing.

Note:

You can use the 10 keys on the remote control to select the preset number. When using the 10 keys, be sure that they are activated for the tuner, not for the CD and others. (See page 43.)

4. Press TUNER (/SEA) MEMORY again while the selected channel number is flashing on the display.



The selected channel number stops flashing. The station is assigned to the selected channel number.



5. Repeat steps 1 to 4 until you store all the stations you want.

To erase a stored preset station

Storing a new station on a used number erases the previously stored one.









To tune in a preset station On the front panel:

1. Turn SOURCE SELECTOR to select the band (FM or AM). The last received station of the selected band is tuned in.

2. Press TUNER PRESET.

3. Turn MULTI JOG until you find the channel you want.

- · Turning it clockwise increases the channel numbers.
- · Turning it counterclockwise decreases the channel numbers.

From the remote control:

1. Press FM/AM.

• Each time you press the button, the band alternates between FM and AM.

2. Press the 10 keys to select a preset channel number.

- For channel number 5, press 5.
- (4)• For channel number 15, press +10 then 5.
- For channel number 20, press +10 then 10. $\overline{(\tau_{0})}$
- For channel number 30, press +10, +10, then 10.

Note:

When you use the 10 keys on the remote control, be sure that they are activated for the tuner, not for the CD and others. (See page 43.)

Selecting the FM Reception Mode

When an FM stereo broadcast is hard to receive or noisy

You can change the FM reception mode while receiving an FM broadcast.

• You can store the FM reception mode for each preset station.

Press FM MODE on the front panel or on the remote control.

• Each time you press the button, the FM reception mode alternates between "AUTO MUTING" and "MONO."



- AUTO MUTING: When a program is broadcasted in stereo, you will hear stereo sound; when in monaural, you will hear monaural sounds. This mode is also useful to suppress static noise between stations. The AUTO MUTING indicator lights up on the display.
- MONO: Reception will be improved although you will lose the stereo effect. In this mode, you will hear noise while tuning into the stations. The AUTO MUTING indicator goes off on the display.

Note:

When using the FM MODE button on the remote control, be sure that the 10 keys are activated for the tuner, not for the CD and others. (See page 43.)

Assigning Names to Preset Stations

You can assign a name of up to four characters to each preset station. When a preset station is tuned in, its assigned name will appear on the display.

Before you start, remember...

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.
- You can use the following characters: Space (_), A Z, and 0 9.

On the front panel ONLY:

- 1. Tune in a preset station. See the left.
- 2. Press TUNER (/SEA) MEMORY.

The preset channel number starts flashing for about 10 seconds.



- If you turn MULTI JOG while the preset channel number is flashing, you can change the preset channel number.
- 3. Press TUNER PRESET, while the preset channel number is flashing. The first character position starts flashing.

4. Turn MULTI JOG to select the first character. while the first character position is flashing.



5. Press TUNER PRESET, while a character you want is flashing. The next character position starts flashing.



- 6. Repeat steps 4 and 5 to enter up to four characters.
- 7. Press TUNER (/SEA) MEMORY while the last selected character is flashing after you have assigned a name.



To erase the input characters

Insert spaces using the same procedure described above.









10

Using the SEA Modes

The SEA (Sound Effect Amplifier) modes give you control of the way your music sounds.

IMPORTANT:

When using the remote control, check to see if its remote control mode selector is set to the correct position: To operate this receiver, set it to "AUDIO/TV/

VCR.'

Selecting Your Favorite SEA Mode

On the front panel:

Press SEA MODE repeatedly until the SEA mode you want appears on the display.

· Each time you press the button, the SEA mode changes as follows:



SEA MODE

SEA ROCK→SEA MUSICAL→SEA MOVIE SEA COUNTRY

SEA ROCK:	Gives a heavy sound. Both high and low frequencies are boosted.
SEA MUSICAL:	Enhances the mid-frequency range, which the human voice is mostly made up of.
SEA MOVIE:	Adds breadth to sounds so you feel like you are in a movie theater.
SEA COUNTRY:	Enhances the high-frequency range so that instruments such the violin and banjo are emphasized.
SEA JAZZ:	Gives a feeling of a live atmosphere. Good for acoustic music.
SEA USERMODE:	Your original SEA adjustment (see the right).
SEA OFF:	No SEA mode is applied (see below).

Notes:

- The SEA modes cannot be used for recording.
- When the SEA mode is turned on, the SEA indicator lights up on the display.
- When the SEA mode is used with the DAP mode (see page 24), sounds may be distorted. If this happens, turn off the DAP mode or decrease the effect level of the DAP mode.

To cancel the SEA mode

Press SEA MODE repeatedly until "SEA OFF" appears. The SEA indicator goes off from the display.

From the remote control:

- 1. Press SOUND. The 10 keys are activated for sound adjustments.
- 2. Press SEA MODE repeatedly until the SEA mode you want appears on the display.



To cancel the SEA mode

Press SEA MODE repeatedly until "SEA OFF" appears in step 2 above. The SEA indicator goes off from the display.

Creating Your Own SEA Mode

You can adjust and store your own SEA adjustment into memory (SEA USERMODE).

Before you start, remember...

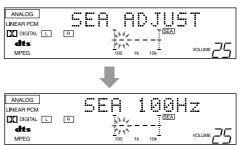
• There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

On the front panel ONLY:

If you do not want to store your adjustment, but rather want to adjust the SEA temporarily, skip step 4 below.

1. Press SEA ADJUST repeatedly until the frequency range (100 Hz, 1 kHz or 10 kHz) you want appears on the display.





2. Turn MULTI JOG to adjust the SEA level of the selected frequency range.



- · Turning it clockwise increases the level.
- Turning it counterclockwise decreases the level.
- 3. Repeat step 1 and 2 to adjust other frequency ranges if necessary.
- 4. Press (TUNER/) SEA MEMORY. Your adjustment is stored into the SEA

USERMODE.





To recall your own SEA adjustment

Press SEA MODE repeatedly until "SEA USERMODE" appears.

To erase a stored adjustment

Storing a new adjustment into SEA USERMODE erases the previously stored one.



Using the DSP Modes.

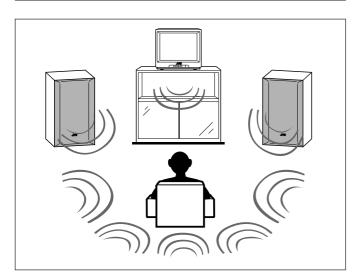
The built-in Surround Processor provides three types of the DSP (Digital Signal Processor) mode — 3D-PHONIC mode, DAP (Digital Acoustic Processor) mode and Surround mode.

3D-PHONIC modes

The 3D-PHONIC mode gives you such a nearly surround effect as is reproduced through the Dolby Surround decoder, which is widely used to reproduce sounds with a feeling of movement like those experienced in movie theaters. The 3D-PHONIC mode is the result of research on sound localization technology carried out at JVC for many years. **This mode can be used when the front speakers are connected to this receiver (without respect to the rear/center speaker connection).**

3D ACTION:	Best for action and war movies — where the				
	action is fast and explosive.				

3D THEATER: Reproduces the sound field of a large theater. This mode can be selected when only front speakers are connected to this receiver and "REAR SPK" and "CENTER SPK" are set to "NONE" (see page 14).

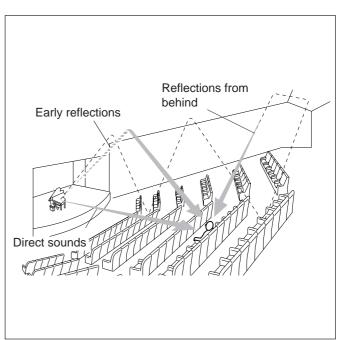


DAP modes

The sound heard in a concert hall or club consists of direct sound and indirect sound — early reflections and reflections from behind. Direct sounds reach the listener directly without any reflection. On the other hand, indirect sounds are delayed by the distances of the ceiling and walls. These direct sounds and indirect sounds are the most important elements of the acoustic surround effects. The DAP mode can create these important elements, and gives you a real "being there" feeling. **This mode can be used when the front speakers are connected to this receiver (without respect to the rear/center speaker connection).**

You can select one of the following to your preference while playing an analog or linear PCM source.

LIVE CLUB:	Gives the feeling of a live music club with a low
	ceiling.
DANCE CLU	B: Gives a throbbing bass beat.
HALL:	Gives clear vocal and the feeling of a concert hall.
PAVILION:	Gives the spacious feeling of a pavilion with a high ceiling.



Surround modes

With this receiver, you can use four types of the Surround mode. Following modes cannot be used when only the front speakers are connected to this receiver (without the rear speakers or center speaker).

Dolby Surround (Dolby Digital and Dolby Pro Logic)*

Used to watch the soundtracks of software encoded with Dolby Digital (bearing the mark $\Box \Box \Box \Box \Box \Box \Box \Box \Box$) or with Dolby Surround (bearing the mark $\Box \Box \Box \Box \Box \Box \Box \Box \Box \Box$).

Dolby Surround encoding format records the left front channel, right front channel, center channel, and rear channel (total 4 channels) signals into 2 channels. The Dolby Pro Logic decoder built in this receiver decode these 2 channel signals into original 4 channel signals — matrix-based multichannel reproduction, and allows you to enjoy the realistic stereo sounds in your listening room. On the other hand, Dolby Digital encoding method (so called a discrete 5.1 channel digital audio format) records and compresses the left front channel, right front channel, center channel, left rear channel, right rear channel, and LFE channel (total 6 channels, but LFE channel is counted as 0.1 channel, therefore called 5.1 channels) signals digitally. Each channel is completely independent from other channel signals to avoid interference, therefore, you can obtain much better sound quality with much stereo and surround effects.

The Dolby Digital decoder built in this receiver can create much more realistic sound field in your listening room. You may feel as if you were in a real theater.

In addition, Dolby Digital enables stereo rear sounds, and sets the cutoff frequency of the rear treble at 20 kHz, comparing to 7 kHz for Dolby Pro Logic. These facts enhance the sound movement and being-there feelings much more than Dolby Pro Logic.

• To enjoy the software encoded with Dolby Digital, you must connect the source component using the digital terminal on the rear of this receiver. (See page 8.)

DTS Digital Surround**

DTS Digital Surround is another discrete 5.1 channel digital audio format available on CD, LD, and DVD software.

Comparing to Dolby Digital, audio compression rate is relatively low. This fact allows DTS Digital Surround format to have more data recorded than Dolby Digital even using the same media, and to add breadth and depth to the reproduced sounds. As a result, DTS Digital Surround features natural, solid and clear sound.

• To enjoy the software encoded with DTS Digital Surround, you must connect the source component using the digital terminal on the rear of this receiver. (See page 8.)

MPEG Multichannel

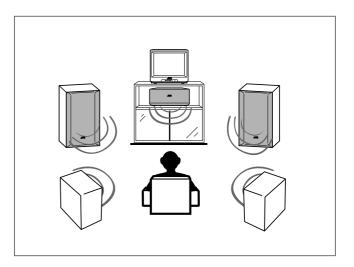
MPEG Multichannel is another discrete 5.1 channel digital audio format available on DVD software, and uses encoding method called MPEG2-Audio. (MPEG stands for "Motion Picture Expert Group" and has been originally developed for compressing video signals.) To watch the soundtracks of video software bearing the mark MPEO Multichannel, the receiver can provide you with MPEG Multichannel decoder.

MPEG Multichannel is automatically selected according to software played back and the speaker arrangement you have done.

• To enjoy the software encoded with MPEG Multichannel, you must connect the source component using the digital terminal on the rear of this receiver. (See page 8.)

JVC Theater Surround

In order to reproduce a more realistic sound field in your listening room while playing soundtracks of software encoded with Dolby Surround (bearing the mark DC DOLBY SURROUND) you can use JVC Theater Surround.



Notes:

- The DSP modes have no effect on monaural sources.
- When you select "DVD MULTI" as the source to play, you cannot select or adjust the DSP modes.
- The DD PRO LOGIC indicator lights up when the Dolby Pro Logic decoder built in this receiver is activated.

DVD MULTI Playback Mode

This receiver provides the DVD MULTI playback mode for reproducing the analog discrete 5.1 channel output mode of the DVD player or other equipment.

You can adjust the DVD MULTI playback mode while playing back a video software such as a DVD using the analog discrete 5.1 channel output mode.

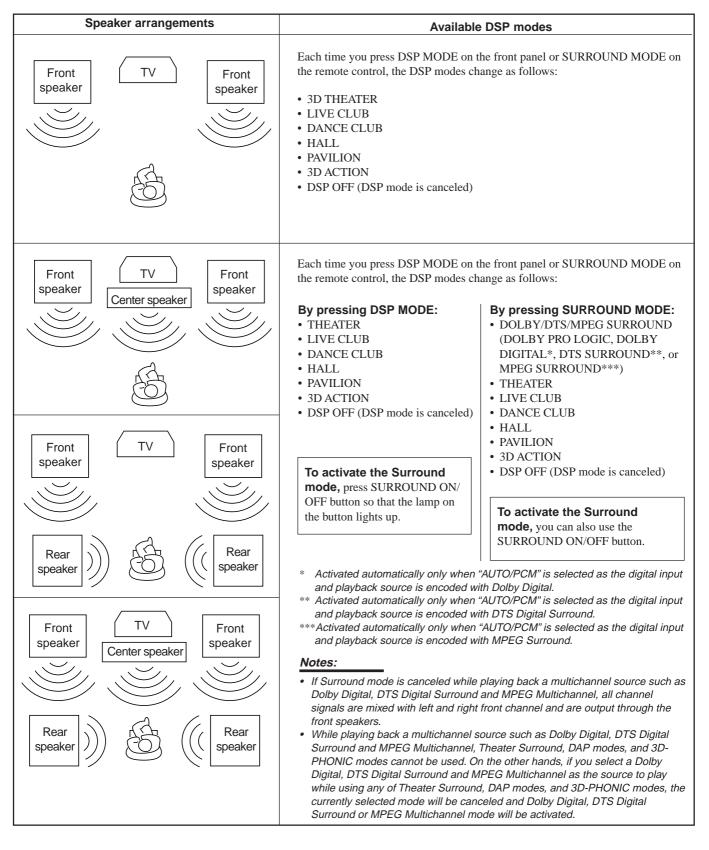
- For the DVD MULTI playback mode connection, see page 7.
- For details on the DVD MULTI playback mode, see page 29.

- * Manufactured under license from Dolby Laboratories. "Dolby," "Pro Logic," and the double-D symbol are trademarks of Dolby Laboratories. Confidential Unpublished Works. ©1992–1997 Dolby Laboratories, Inc. All rights reserved.
- ** Manufactured under license from Digital Theater Systems, Inc. US Pat. No. 5,451,942 and other world-wide patents issues and pending. "DTS" and "DTS Digital Surround" are trademarks of Digital Theater Systems, Inc. ©1996 Digital Theater Systems, Inc. All rights reserved.

English

Available DSP Modes According to the Speaker Arrangement

Available DSP modes will vary depending on how many speakers are used with this receiver. Make sure that you have set the speaker information correctly (see page 14).



IMPORTANT:

When using the remote control, check to see if its remote control mode selector is set to the correct position:

To operate this receiver, set it to "AUDIO/TV/ VCR.

Adjusting the 3D-PHONIC Modes

Once you have adjusted the 3D-PHONIC modes, the adjustment is memorized for each 3D-PHONIC mode.

Before you start, remember...

- Make sure that you have set the speaker information correctly (see page 14).
- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

On the front panel:

display.

1. Press DSP MODE repeatedly until "3D ACTION" or "3D THEATER" appears on the



ICE/SURROUND ADJUST

DSP MODE

The 3D-PHONIC, DSP, and D PRO LOGIC indicators also light up on the display.

2. Adjust the effect level.

- 1) Press (BALANCE/) SURROUND ADJUST repeatedly until "DSP EFFECT" appears on the display. The display changes to show the current setting.
- 2) Turn MULTI JOG to select the effect level.
 - · As you turn it, the effect level changes as follows:

DSP EFFECT 1 \leftrightarrow DSP EFFECT 2 \leftrightarrow DSP EFFECT 3

As the number increases, the selected 3D-PHONIC mode becomes stronger.

From the remote control:

1. Press SURROUND MODE repeatedly until "3D ACTION" or "3D THEATER" appears on the display.



The 3D-PHONIC, DSP, and D PRO LOGIC indicators also light up on the display.

2. Press SOUND.

The 10 keys are activated for sound adjustments.



3. Press EFFECT to select an effect level you want.



English

DSP EFFECT 1 → DSP EFFECT 2 → DSP EFFECT 3 DSP EFFECT 5 ← DSP EFFECT 4

As the number increases, the selected 3D-PHONIC mode becomes stronger.

Adjusting the DAP Modes

Once you have adjusted the DAP modes, the adjustment is memorized for each DAP mode.

Before you start, remember...

- Make sure that you have set the speaker information correctly (see page 14).
- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.
- You cannot adjust the rear speaker output level when you have set "REAR SPK" to "NONE." See page 14.
- When the DAP mode is used with the SEA mode (see page 20), sounds may be distorted. If this happens, turn off the SEA mode.

On the front panel:

1. Press DSP MODE repeatedly until the DAP mode — LIVE CLUB, DANCE CLUB, HALL, or **PAVILION** — appears on the display.

The DSP indicator also lights up on the display.

• When you have set "REAR SPK" to "NONE," the 3D-PHONIC indicator also lights up.

2. Adjust the speaker output levels.

1) Press (BALANCE/) SURROUND ADJUST repeatedly until one of the indications appears on the display. "REAR L LEVEL":

To adjust the left rear speaker level. "REAR R LEVEL":

To adjust the right rear speaker level. 2) Turn MULTI JOG to adjust the

- selected speaker output level (from -10 dB to +10 dB).
- 3) Repeat 1) and 2) to adjust the other speaker output level.



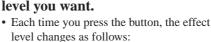




RALANCE/SURROUND



24



3. Adjust the effect level.

- 1) Press (BALANCE/) SURROUND ADJUST repeatedly until "DSP EFFECT" appears on the display. The display changes to show the current setting.
- 2) Turn MULTI JOG to select the effect level.
 - · As you turn it, the effect level changes as follows:

DSP EFFECT 1 ↔ DSP EFFECT 2 ↔ DSP EFFECT 3

DSP EFFECT 5 ← DSP EFFECT 4

As the number increases, the selected DAP mode becomes stronger.

From the remote control:

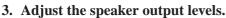
1. Press SURROUND MODE repeatedly until the DAP mode — LIVE CLUB, DANCE CLUB, HALL, or PAVILION — appears on the display.

The DSP indicator also lights up on the display.

• When you have set "REAR SPK" to "NONE," the 3D-PHONIC indicator also lights up.

2. Press SOUND.

The 10 keys are activated for sound adjustments.



- To adjust the left rear speaker level, press REAR•L -/+ (from -10 dB to +10 dB).
- · To adjust the right rear speaker level, press REAR•R -/+ (from -10 dB to +10 dB).
- 4. Press EFFECT to select an effect level you want.
 - · Each time you press the button, the effect level changes as follows:

DSP EFFECT 1 → DSP EFFECT 2 → DSP EFFECT 3 · DSP EFFECT 5 ← DSP EFFECT 4

As the number increases, the selected DAP mode becomes stronger.

Adjusting the Surround Modes

Once you have adjusted the Surround modes, the adjustment is memorized for each Surround mode.

Dolby, DTS and MPEG Surround adjustments

Before you start, remember...

- · Make sure that you have set the speaker information correctly (see page 14).
- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.
- You cannot adjust the rear speaker output levels when you have set "REAR SPK" to "NONE." See page 14.
- You cannot adjust the center speaker output level you have set "CENTER SPK" to "NONE." See page 14.

From the remote control:

1. Press SURROUND ON/OFF to activate an appropriate Surround mode — PRO LOGIC, DOLBY **DIGITAL, DTS SURROUND or** MPEG SURROUND.



- · Each time you press the button, the Surround mode turns on and off alternately.
- When "PRO LOGIC" is selected, the DD PRO LOGIC indicator lights up on the display.

Note:

You can also press SURROUND MODE to activate an appropriate Surround mode.

2. Press SOUND.

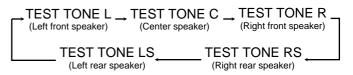
The 10 keys are activated for sound adjustments.



3. Press TEST to check the speaker output balance.

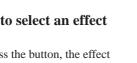


"TEST TONE L" starts flashing on the display, and a test tone comes out of the speakers in the following order:



Notes:

- You can adjust the speaker output levels without outputting the test tone.
- No test tone comes out of the center speaker when "CENTER SPK" is set to "NONE" (see page 14).
- No test tone comes out of the rear speakers when "REAR SPK" is set to "NONE" (see page 14).
- If the TV is turned on and the proper video input is selected on the TV, the test tone screen will appear on the TV.





SURROUND

SURROUND

ADJUST



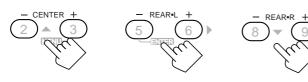




FFFFC

4. Adjust the speaker output levels.

- To adjust the center speaker level, press CENTER –/+ (from –10 dB to +10 dB).
- To adjust the left rear speaker level, press REAR•L –/+ (from -10 dB to +10 dB).
- To adjust the right rear speaker level, press REAR•R –/+ (from -10 dB to +10 dB).



5. Press TEST again to stop the test tone.



On the front panel:

You can also use the buttons on the front panel to adjust the Surround modes. However, no test tone is available when using the buttons on the front panel. So, make adjustments while listening to the sound of the source played back.

1. Press SURROUND ON/OFF to activate an appropriate Surround mode — PRO LOGIC, DOLBY DIGITAL, DTS SURROUND or MPEG SURROUND.



- Each time you press the button, the Surround mode turns on and off alternately.
- When "PRO LOGIC" is selected, the D PRO LOGIC indicator lights up on the display.

2. Adjust the speaker output levels.

1) Press (BALANCE/) SURROUND ADJUST repeatedly until one of the indications appears on the display. "CENTER LEVEL": To adjust the center speaker level.

To adjust the center speaker level. "REAR L LEVEL":

To adjust the left rear speaker level. "REAR R LEVEL":

- To adjust the right rear speaker level.
- 2) Turn MULTI JOG to adjust the selected speaker output level (from -10 dB to +10 dB).
- 3) Repeat 1) and 2) to adjust the other speaker output levels.



JVC Theater Surround adjustments

Before you start, remember...

- Make sure that you have set the speaker information correctly (see page 14).
- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.
- You cannot adjust the rear speaker output levels when you have set "REAR SPK" to "NONE." See page 14.
- You cannot adjust the center speaker output level when you have set "CENTER SPK" to "NONE." See page 14.

From the remote control:

1. Press SURROUND MODE repeatedly until "THEATER" appears on the display.



The $\Box\Box$ PRO LOGIC and DSP indicators also light up on the display.

2. Press SOUND.

The 10 keys are activated for sound adjustments.

3. Press TEST to check the speaker output balance.

"TEST TONE L" starts flashing on the display, and a test tone comes out of the speakers in the following order:



SOUND

TEST TONE L \rightarrow TEST TONE C \rightarrow TEST TONE R (Left front speaker) \rightarrow (Center speaker) \rightarrow (Right front speaker) \rightarrow TEST TONE LS. TEST TONE RS

(Right rear speaker)

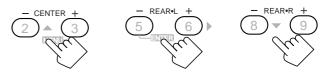
(Left rear speaker)

Notes:

- You can adjust the speaker output levels without outputting the test tone.
- No test tone comes out of the center speaker when "CENTER SPK" is set to "NONE" (see page 14).
- No test tone comes out of the rear speakers when "REAR SPK" is set to "NONE" (see page 14).
- If the TV is turned on and the proper video input is selected on the TV, the test tone screen will appear on the TV.

4. Adjust the speaker output levels.

- To adjust the center speaker level, press CENTER –/+ (from –10 dB to +10 dB).
- To adjust the left rear speaker level, press REAR•L –/+ (from –10 dB to +10 dB).
- To adjust the right rear speaker level, press REAR•R –/+ (from –10 dB to +10 dB).



5. Press TEST again to stop the test tone.



DSP MODE

CE/SURROUND ADJUST

CE/SURROUND ADJUST

- 6. Press EFFECT to select an effect level you want.
 - Each time you press the button, the effect level changes as follows:

→ DSP EFFECT 1 → DSP EFFECT 2 → DSP EFFECT 3 -

– DSP EFFECT 5 ← DSP EFFECT 4 ·

As the number increases, JVC Theater Surround becomes stronger.

On the front panel:

You can also use the buttons on the front panel to adjust the Surround modes. However, no test tone is available when using the buttons on the front panel. So, make adjustments while listening to the sound of the source played back.

1. Press DSP MODE repeatedly until "THEATER" appears on the display.

The 🖾 PRO LOGIC and DSP indicators also light up on the display.

- 2. Adjust the speaker output levels. 1) Press (BALANCE/) SURROUND
 - (1) Press (BALANCE/) SURROUND ADJUST repeatedly until one of the indications appears on the display. "CENTER LEVEL":

To adjust the center speaker level. "REAR L LEVEL":

To adjust the left rear speaker level. "REAR R LEVEL":

To adjust the right rear speaker level.

- 2) Turn MULTI JOG to adjust the selected speaker output level (from -10 dB to +10 dB).
- 3) Repeat 1) and 2) to adjust the other speaker output levels.

3. Adjust the effect level.

- 1) Press (BALANCE/) SURROUND ADJUST repeatedly until "DSP EFFECT" appears on the display. The display changes to show the current setting.
- 2) Turn MULTI JOG to select the effect level.

As you turn it, the effect level changes as follows:

→ DSP EFFECT 1 ↔ DSP EFFECT 2 ↔ DSP EFFECT 3 ← → DSP EFFECT 5 ← DSP EFFECT 4 ←

As the number increases, JVC Theater Surround becomes stronger.

Activating the DSP Modes

You can use only one DSP mode at a time. When a DSP mode is activated, another DSP mode is canceled if in use.

For Dolby Pro Logic, Dolby Digital, DTS Digital Surround and MPEG Multichannel

1. Press SURROUND ON/OFF so that the lamp on the front panel button lights up.

• Each time you press the button, the Dolby/DTS/MPEG Surround turns on and off alternately.





On the front panel

On the remote control

2. Select and play a sound source.

- To enjoy Dolby Pro Logic, play back a software encoded with Dolby Surround and labeled with DCDLBY SURROUND mark.
- To enjoy Dolby Digital, play back a software encoded with Dolby Digital and labeled with Dolby Digital and labeled with mark.
- To enjoy DTS Digital Surround, play back a software encoded with DTS Digital Surround and labeled with **CTS** mark.
- To enjoy MPEG Multichannel, play back a software encoded with MPEG Multichannel and labeled with MPEG Multichannel mark.

To cancel the Dolby/DTS/MPEG Surround mode

Press SURROUND ON/OFF again so that the lamp on the front panel button goes off. ("SURROUND OFF" appears on the display.)





On the front panel

On the remote control

For the other DSP modes

On the front panel:

1. Press DSP MODE repeatedly until the mode you want appears on the display.



DSP MODE

SURROUN

- Each time you press the button, the DSP modes change. (See page 23 for more details.)
- 2. Select and play a sound source.
 - To enjoy 3D-PHONIC and JVC Theater Surround, play back a software encoded with Dolby Surround and labeled with DCDEDUBY SURROUND mark.

To cancel the DSP mode

Press DSP MODE repeatedly until "DSP OFF" appears on the display.



- **1.** Press SURROUND MODE repeatedly until the DSP mode you want appears on the display.
 - Each time you press the button, the DSP modes change.

2. Select and play a sound source.

• To enjoy 3D-PHONIC and JVC Theater Surround, play back a software encoded with Dolby Surround and labeled with DCIDOLBY SURROUND mark.

To cancel the DSP mode

Press SURROUND MODE repeatedly until "DSP OFF" appears on the display.



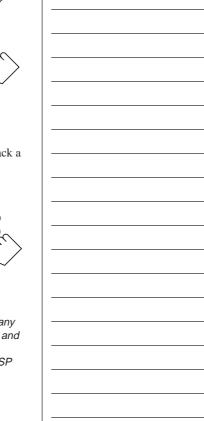
Note:

While playing back MPEG Multichannel or Dolby Digital source through a digital input terminal, you can neither select nor adjust any DSP mode. If any DSP mode is in use, it is temporarily canceled, and normal stereo sounds are reproduced.

To enjoy the MPEG Multichannel and Dolby Digital source with DSP mode, change the input mode from the digital input to the analog input. (See page 16.)

MEMO -

Use this column to write down your DSP mode adjustments for your future reference.



Using the DVD MULTI Playback Mode

This receiver provides the DVD MULTI playback mode for reproducing the analog discrete output mode of the DVD player. Before playing back a DVD, refer also to the manual supplied with the DVD player.

IMPORTANT:

When using the remote control, check to see if its remote control mode selector is set to the correct position: **To operate this receiver,** set it to "AUDIO/TV/VCR."

/ск.

Activating the DVD MULTI Playback Mode

You can adjust the DVD MULTI playback mode while playing back a DVD using the analog discrete output mode on the DVD player. Once you have made adjustments, the receiver memorizes the adjustments until you change them. You also need to set the DVD player to the analog discrete output mode.

Before you start, remember...

• There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

On the front panel:

1. Turn SOURCE SELECTOR until "DVD MULTI" appears on the display.

Note:

When you select "DVD MULTI" as the source to play, the DSP mode is canceled temporarily, and the SURROUND ON/OFF and DSP MODE buttons do not work.

- 2. Select the analog discrete output mode on the DVD player, and start playing a DVD.
 - Refer to the manual supplied with the DVD player.

If you need to make any adjustment, go to the following steps.

- 3. Adjust the speaker output levels.
 - 1) Press (BALANCE/) SURROUND ADJUST repeatedly until one of the indications appears on the display. "CENTER LEVEL":

To adjust the center speaker level. "REAR L LEVEL":

To adjust the left rear speaker level. "REAR R LEVEL":

To adjust the right rear speaker level.

- 2) Turn MULTI JOG to adjust the selected speaker output level (from -10 dB to +10 dB).
- 3) Repeat 1) and 2) to adjust the other speaker output levels.



From the remote control:

1. Press DVD MULTI so that "DVD MULTI" appears on the display.



SOUND

Note:

When you select "DVD MULTI" as the source to play, the DSP mode is canceled temporarily, and the SURROUND ON/OFF and SURROUND MODE buttons do not work.

Select the analog discrete output mode on the DVD player, and start playing a DVD.
 Before to the manual supplied with the DVD player.

• Refer to the manual supplied with the DVD player.

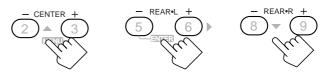
If you need to make any adjustment, go to the following steps.

3. Press SOUND.

The 10 keys are activated for adjusting the sound.

4. Adjust the speaker output levels.

- To adjust the center speaker level, press CENTER –/+ (from 10 dB to +10 dB).
- To adjust the left rear speaker level, press REAR•L –/+ (from –10 dB to +10 dB).
- To adjust the right rear speaker level, press REAR•R –/+ (from –10 dB to +10 dB).

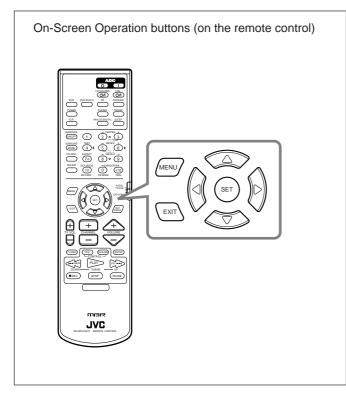


Using the On-Screen Menus

You can use the Menus on the TV screen to control the receiver.

To use this function, you need to connect the TV to the MONITOR OUT jack on the rear panel (see page 7), and set the TV's input mode to the proper position to which the receiver is connected.

• When the TV's input mode is incorrect; for example, a different video input or TV tuner mode is selected, you cannot show the Menus on the TV screen.

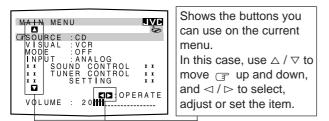


Selecting the Source to Play (Also see page 10)

1. Press MENU.

The MAIN MENU appears on the TV.

• Pressing one of the △ / ▽ / ⊲ / ▷ buttons also displays the MAIN MENU.



Notes:

- "INPUT" appears only when the digital input (DIGITAL IN) terminal setting have been correctly done for the digital source currently selected. (See page 16.)
- The on-screen display will disappear if no operation is done for about 1 minute.
- **2.** Press $\triangle / \bigtriangledown$ to move \square to "SOURCE."
- **3.** Press \lhd / \triangleright to select the source.
- **4. When you finish, press EXIT.** The menu disappears from the TV.

Selecting Different Sources for Picture and Sound (Also see page 11)

1. Press MENU.

The MAIN MENU appears on the TV.

• Pressing one of the △ / ▽ / ⊲ / ▷ buttons also displays the MAIN MENU.

- 2. Press △ / ▽ to move to "VISUAL."
- 3. Press ⊲ / ▷ to select a different video source.



4. When you finish, press EXIT. The menu disappears from the TV.

Activating the DSP Modes (Also see page 27)

1. Press MENU.

- The MAIN MENU appears on the TV.
- Pressing one of the △ / ▽ / ⊲ / ▷ buttons also displays the MAIN MENU.
- 2. Press △ / ▽ to move () to "MODE."
- 3. Press ⊲ / ▷ to select the DSP mode you want to use.



4. When you finish, press EXIT. The menu disappears from the TV.

Selecting the Analog or Digital Input Mode (Also see page 16)

This selection is only possible when the digital input (DIGITAL IN) terminal setting have been correctly done for the digital source currently selected.

1. Press MENU.

The MAIN MENU appears on the TV.

- Pressing one of the △ / ▽ / ⊲ / ▷ buttons also displays the MAIN MENU.
- 2. Press △ / ▽ to move () to "INPUT."
- Press < / ▷ to select the digital or analog input you want. For details, see page 16.



4. When you finish, press EXIT. The menu disappears from the TV.

Adjusting the Front Speaker Output Balance (Also see page 13)

- 1. Press MENU.
 - The MAIN MENU appears on the TV.
 - Pressing one of the $\triangle / \nabla / \lhd / \triangleright$ buttons also displays the MAIN MENU.
- **2.** Press $\triangle / \bigtriangledown$ to move \square to "SOUND" **CONTROL**," then press \lhd / \triangleright . The SOUND CONTROL menu appears.
- **3.** Press \triangle / ∇ to move \square to "BAL." (Balance).
- SOUND CONTROL JVC X SURROUND LEVEL x x x x ☐ BAL.:R-21 BASS BOOST : INPUT ATT : SUBWFR LEVEL: OFF NORMAL 0dB 4. Press $\triangleleft / \triangleright$ to adjust CD: OPERATE
- 5. When you finish, press EXIT repeatedly until the menu disappears from the TV.

Reinforcing the Bass

(Also see page 12)

the balance.

- 1. Press MENU. The MAIN MENU appears on the TV. • Pressing one of the $\triangle / \nabla / \lhd / \triangleright$ buttons also displays the MAIN MENU.
- **2.** Press \triangle / ∇ to move \square to "SOUND" **CONTROL**," then press \lhd / \triangleright . The SOUND CONTROL menu appears.
- **3.** Press \triangle / ∇ to move \square to "BASS BOOST."

4. Press $\triangleleft / \triangleright$ to turn the



- bass boost function "ON" or "OFF."
- 5. When you finish, press EXIT repeatedly until the menu disappears from the TV.
- Attenuating the Input Signal (Also see page 12)
- 1. Press MENU.
 - The MAIN MENU appears on the TV.
 - Pressing one of the $\triangle / \nabla / \lhd / \triangleright$ buttons also displays the MAIN MENU.
- **2.** Press $\triangle / \bigtriangledown$ to move \square to "SOUND **CONTROL**," then press \lhd / \triangleright . The SOUND CONTROL menu appears.
- **3.** Press \triangle / ∇ to move \square to "INPUT ATT."
- 4. Press $\triangleleft / \triangleright$ to turn the **Input Attenuator mode** "ATT ON" or "NORMAL."

•	SOUND CONTROL
	x x SURROUND LEVEL X X x x SEA X X
	BAL :R-21 BASS_BOOST : OFF
,	GTINPUT ATT : NORMAL SUBWFR LEVEL: 0dB

5. When you finish, press EXIT repeatedly until the menu disappears from the TV.

Adjusting the Subwoofer Output Level (Also see page 12)

1. Press MENU.

The MAIN MENU appears on the TV.

- Pressing one of the $\triangle / \nabla / \lhd / \triangleright$ buttons also displays the MAIN MENU.
- **2.** Press $\triangle / \bigtriangledown$ to move \square to "SOUND" **CONTROL**," then press \lhd / \triangleright . The SOUND CONTROL menu appears.
- **3.** Press \triangle / ∇ to move \square to "SUBWFR LEVEL." 4. Press \lhd / \triangleright to adjust the subwoofer output



5. When you finish, press EXIT repeatedly until the menu disappears from the TV.

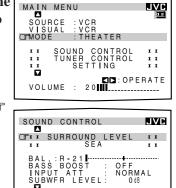
Adjusting the DSP Modes

(Also see pages 24 - 27)

1. Press MENU.

level.

- The MAIN MENU appears on the TV.
- Pressing one of the $\triangle / \nabla / \lhd / \triangleright$ buttons also displays the MAIN MENU.
- **2.** Press $\triangle / \bigtriangledown$ to move \square to "MODE."
- 3. Press \triangleleft / \triangleright to select the DSP mode you want to adjust. • In this example,
 - "THEATER" is selected.
- **4.** Press \triangle / ∇ to move \square to "SOUND CONTROL," then press $\triangleleft / \triangleright$. The SOUND CONTROL menu appears.
- **5.** Press \triangle / ∇ to move \square to "SURROUND LEVEL," then press $\triangleleft / \triangleright$. The SURROUND LEVEL menu appears.



SURROUND LEVEL JVC CD: OPERATE

6. Press \triangle / ∇ to move \square to the item you want to set or adjust, then press \lhd / \triangleright .

On these adjustment menus, you can do the following:

For 3D-PHONIC (3D ACTION, 3D THEATER): "DSP EFFECT": Select the effect level.

For DAP (LIVE CLUB, DAM	NCE CLUB, HALL, PAVILION):
	djust the left rear speaker output
10	vel. *
	djust the right rear speaker output
10	vel. *
	elect the effect level.
For Dolby Pro Logic:	
	utput a test tone.
	djust the center speaker output vel. **
	djust the left rear speaker output vel. *
	djust the right rear speaker output vel. *
For Dolby Digital, DTS I	Digital Surround and MPEG
Multichannel:	0
"TEST TONE": O	utput a test tone.
"CENTER LEVEL": A	diust the center speaker output
CDIVIDIC DD V DD VIII	ujusi me cemei speaker output
	vel. **
le "REAR L LEVEL": A	vel. ** djust the left rear speaker output
le "REAR L LEVEL": A le	vel. ** djust the left rear speaker output vel. *
le "REAR L LEVEL": A le "REAR R LEVEL": A	vel. ** djust the left rear speaker output vel. * djust the right rear speaker output
le "REAR L LEVEL": Ad le "REAR R LEVEL": Ad le	vel. ** djust the left rear speaker output vel. * djust the right rear speaker output vel. *
le "REAR L LEVEL": A le "REAR R LEVEL": A le For JVC Theater Surrou	vel. ** djust the left rear speaker output vel. * djust the right rear speaker output vel. * Ind:
le "REAR L LEVEL": A le "REAR R LEVEL": A le For JVC Theater Surrou "TEST TONE": O	vel. ** djust the left rear speaker output vel. * djust the right rear speaker output vel. * Ind: utput a test tone.
le "REAR L LEVEL": A le "REAR R LEVEL": A le For JVC Theater Surrou "TEST TONE": O "CENTER LEVEL": A	vel. ** djust the left rear speaker output vel. * djust the right rear speaker output vel. * Ind:
le "REAR L LEVEL": A le "REAR R LEVEL": A le For JVC Theater Surrou "TEST TONE": O "CENTER LEVEL": A le "REAR L LEVEL": A	vel. ** djust the left rear speaker output vel. * djust the right rear speaker output vel. * ind: utput a test tone. djust the center speaker output
le "REAR L LEVEL": Ai le "REAR R LEVEL": Ai le For JVC Theater Surrou "TEST TONE": O "CENTER LEVEL": Ai le "REAR L LEVEL": Ai le "REAR R LEVEL": Ai	vel. ** djust the left rear speaker output vel. * djust the right rear speaker output vel. * ind: utput a test tone. djust the center speaker output vel. ** djust the left rear speaker output

Notes:

- Not displayed when "REAR SPK" is set to "NONE" (see page 14).
- **Not displayed when "CENTER SPK" is set to "NONE" (see page 14).
- 7. When you finish, press EXIT repeatedly until the menu disappears from the TV.

Adjusting the DVD MULTI Playback Mode (Also see page 29)

- 1. Press MENU.
 - The MAIN MENU appears on the TV.
 - Pressing one of the △ / ▽ / ⊲ / ▷ buttons also displays the MAIN MENU.
- **2.** Press $\triangle / \bigtriangledown$ to move \square to "SOURCE."
- **3.** Press \triangleleft / \triangleright to select "DVD MULTI."
- 4. Press △ / ▽ to move to "SOUND CONTROL," then press ⊲ / ▷.
 The SOUND CONTROL menu appears.
- 5. Press △ / ▽ to move to "SURROUND LEVEL," then press ⊲ / ▷. The SURROUND LEVEL menu appears.

SURROUND LEVEL
CERCENTER LEVEL: 0 dB REAR L LEVEL: +6 dB REAR R LEVEL: -4 dB

6. Press $\triangle / \bigtriangledown$ to move \square to the item you want to set or adjust, then press \lhd / \triangleright .

On this adjustment menu, you can do the following:

"CENTER LEVEL": Adjust the center speaker output level. "REAR L LEVEL": Adjust the left rear speaker output level. "REAR R LEVEL": Adjust the right rear speaker output level.

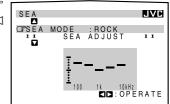
- 7. When you finish, press EXIT repeatedly until the menu disappears from the TV.
- Selecting Your Favorite SEA Mode (Also see page 20)

1. Press MENU.

The MAIN MENU appears on the TV.

• Pressing one of the △ / ▽ / ⊲ / ▷ buttons also displays the MAIN MENU.

- 2. Press $\triangle / \bigtriangledown$ to move \square to "SOUND CONTROL," then press \lhd / \triangleright . The SOUND CONTROL menu appears.
- 3. Press △ / ▽ to move ☞ to "SEA," then press ⊲ / ▷. The SEA menu appears.



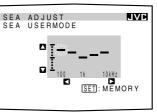
- 4. Press $\triangle / \bigtriangledown$ to move \square to "SEA MODE."
- 5. Press \lhd / \triangleright to select the SEA mode you want.
- 6. When you finish, press EXIT repeatedly until the menu disappears from the TV.
- Creating Your Own SEA Mode (Also see page 20)
- 1. Press MENU.
 - The MAIN MENU appears on the TV.

Pressing one of the △ / ▽ / ⊲ / ▷ buttons also displays the MAIN MENU.

- Press △ / ▽ to move riangleright to "SOUND CONTROL," then press < / / ▷. The SOUND CONTROL menu appears.
- 3. Press \triangle / ∇ to move \square to "SEA," then press \lhd / \triangleright .

The SEA menu appears.

4. Press $\triangle / \bigtriangledown$ to move **T** to "SEA ADJUST." The SEA ADJUST menu appears.



5. Press $\triangle / \bigtriangledown / \lhd / \triangleright$ to adjust the SEA mode as you want.

> $\triangleleft / \triangleright$: Select the frequency ranges. \triangle / ∇ : Adjust the frequency levels.

- 6. Press SET to store the setting into the SEA **USERMODE.**
 - · If you press EXIT, without pressing SET in this step, you can return to the SEA menu. (The adjustment you have made is active but not stored.)
- 7. When you finish, press EXIT repeatedly until the menu disappears from the TV.
 - Setting the Basic Setting Items (Also see pages 14 - 17)
- 1. Press MENU.
 - The MAIN MENU appears on the TV.
 - Pressing one of the $\triangle / \nabla / \lhd / \triangleright$ buttons also displays the MAIN MENU.

SETTING 1

SETTING 2

ATT

SUBWOOFER FRONT SP CENTER SP REAR SP CNTR DELA REAR DELA

JVC

* *

JVC

X X

еc

0 dB MID DVD CD TV NORMAL

PREVIOUS PAGE

- **2.** Press \triangle / ∇ to move \square to "SETTING," then press \lhd / \triangleright . The SETTING 1 or SETTING 2 menu appears.
- **3.** Press \triangle / ∇ to move \square to the item you want to set or adjust, then press $\triangleleft / \triangleright$.
 - To go to the SETTING 2 menu, move T to "NEXT PAGE," then press \lhd / \triangleright .
 - To go back to the SETTING 1 menu, move (to "PREVIOUS PAGE," then press $\triangleleft / \triangleright$.

On the SETTING 1 and 2 menus, you can do the following:

"SUBWOOFER":	Set the subwoofer information (see page 14).
"FRONT SPK":	Set the front speaker information (see page 14).
"CENTER SPK":	Set the center speaker information (see page 14).
"REAR SPK":	Set the rear speaker information (see page 14).
"CNTR DELAY":	Adjust the delay time of the center speaker output (see page 14).*
"REAR DELAY":	Adjust the delay time of the rear speaker output (see page 14).**
"CROSSOVER":	Set the crossover frequency (see page 15).

"LFE ATT.":	Set the low frequency effect attenuator
	level (see page 15).
"COMP.":	Set the dynamic range compression
	(see page 15).
"DIGITAL 1/2/3":	Set the digital input terminals
	(see page 16).
"FL DISP.":	Shows the disc text information on the
	display (see page 17).

Notes:

- Not adjustable when "CENTER SPK" is set to "NONE" (see page 14).
- **Not adjustable when "REAR SPK" is set to "NONE" (see page 14).
- 4. When you finish, press EXIT repeatedly until the menu disappears from the TV.
- **Operating the Tuner** (Also see pages 18 and 19)

1. Press MENU.

The MAIN MENU appears on the TV.

• Pressing one of the $\triangle / \nabla / \lhd / \triangleright$ buttons also displays the MAIN MENU.

2. Press \triangle / ∇ to move \square to **"TUNER CONTROL**," then press $\triangleleft / \triangleright$. The TUNER CONTROL menu appears.



3. Press \triangle / ∇ to move \square to the item you want to set or adjust, then press $\triangleleft / \triangleright$.

On the TUNER CONTROL menu, you can do the following:

"PRESET CH":	Select a preset channel station.
"BAND":	Select the band.
"FREQUENCY":	Tune in a station manually.
"FM MODE":	Select the FM reception mode.*
"PRESET MEMORY": See "Storing the Preset Stations" on	
the next page.	

Note:

* Not displayed when an AM station is selected.

4. When you finish, press EXIT repeatedly until the menu disappears from the TV.

Storing the Preset Stations (Also see page 18)

- 1. Press MENU.
 - The MAIN MENU appears on the TV.
 - Pressing one of the $\triangle / \nabla / \lhd / \triangleright$ buttons also displays the MAIN MENU.
- **2.** Press $\triangle / \bigtriangledown$ to move \square to "TUNER **CONTROL**," then press \lhd / \triangleright . The TUNER CONTROL menu appears.
- 3. Tune into a station on the TUNER CONTROL menu, referring to "Operating the Tuner" on the previous page.
- **4.** Press \triangle / ∇ to move \square to "PRESET **MEMORY,"** then press $\triangleleft / \triangleright$. The PRESET MEMORY menu appears.



- **5.** Press \lhd / \triangleright to select a preset station number vou want.
- 6. Press SET to store the setting.
- 7. When you finish, press EXIT repeatedly until the menu disappears from the TV.

Assigning Names to Preset Stations (Also see page 19)

- 1. Press MENU.
 - The MAIN MENU appears on the TV.
 - Pressing one of the $\triangle / \nabla / \lhd / \triangleright$ buttons also displays the MAIN MENU.
- **2.** Press $\triangle / \bigtriangledown$ to move \square to "TUNER **CONTROL**," then press \lhd / \triangleright . The TUNER CONTROL menu appears.
- **3.** Press $\triangle / \bigtriangledown$ to move \square to "PRESET CH."
- 4. Press $\triangleleft / \triangleright$ to select a preset station.
- **5.** Press \triangle / ∇ to move \square to "PRESET **MEMORY,"** then pres $\triangleleft / \triangleright$. The PRESET MEMORY menu appears.

Ŧ	PRESET MEMORY
s	GFPRESET CH : CH 1 PRESET NAME:
	(<u>3E</u> 1): MEMORY 【□□: OPERATE

- 6. Press \triangle / ∇ to move \square to "PRESET NAME," then press SET. The character entry screen appears.
- 7. Press $\triangle / \bigtriangledown / \lhd / \triangleright$ to move r in front of a character you want.

You can also select the following:

- To enter space (SPACE) :
- CANCEL : To erase the character
- To go back to the previous character position or go **← →** : to the next character position

(SPACE)

- 8. Press SET to enter the selected character.
- 9. Repeat steps 7 and 8 to enter up to four characters.
- **10.Press** $\triangle / \bigtriangledown / \lhd / \triangleright$ to move r to "PRESET NAME," then press SET to store the setting. The TUNER CONTROL menu appears again.



PRESET MEMORY JVC FM 87.50 WH: AUTO MUTING

PRESET CH : CH 1 PRESET NAME: GA B C D E F G H I J K L M N O E F G N I U V W X Y Z Q R S T U V 1 2 3 4 5 6 7 8 9 00

5678

90 CANCEL

(SET) : ENTER

MAKIC: OPERATE

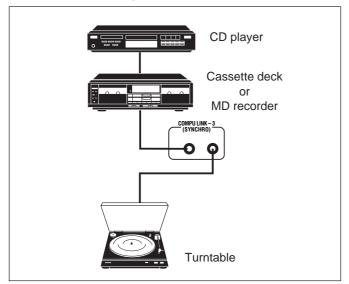
TUNER CONTROL JVC PRESET CH BAND : 1 ABCD :FM FREQUENCY FM MODE : 87.50 MHz : AUTO MUTING T PRESET MEMORY ** SD: ENTER

11. When you finish, press EXIT repeatedly until the menu disappears from the TV.

The COMPU LINK remote control system allows you to operate JVC audio components through the remote sensor on the receiver.

To use this remote control system, you need to connect JVC audio components through the COMPU LINK-3 (SYNCHRO) jacks (see below) in addition to the connections using cables with RCA pin plugs (see pages 5 and 6).

 Make sure that the AC power cords of these components are unplugged before connection. Plug the AC power cords only after all connections are complete.



Notes:

- If your audio component has two COMPU LINK-3 (SYNCHRO) jacks, you can use either one. If it has only one COMPU LINK-3 (SYNCHRO) jack, connect it so that it is the last item in the series of components. (For example, the turntable or CD player in the diagram above.)
- To operate the cassette deck or MD recorder using the COMPU LINK remote control system, set the source name correctly. (See page 13.)
- · Refer also to the manuals supplied with your audio components.

This remote control system allows you to use four functions listed below.

<u>Remote Control through the Remote Sensor on the</u> <u>Receiver</u>

You can control the connected audio components through the remote sensor on the receiver using this remote control. Aim the remote control directly at the remote sensor on the receiver. For details, see pages 43 and 44.

Automatic Source Selection

When you press the play (\blacktriangleright) button on a connected component or on its own remote control, the receiver automatically turns on and changes the source to the component. On the other hand, if you select a new source on the receiver or on the remote control, the selected component begins playing immediately. In both cases, the previously selected source continues playing

without sound for a few seconds.

Automatic Power On/Off (Standby): only possible with the COMPU LINK-3 connection

Both the CD player and cassette deck (or MD recorder) turn on and off (standby) along with the receiver.

When you turn on the receiver, the CD player or cassette deck (or MD recorder) will turn on automatically, depending on which component has been previously selected.

When you turn off the receiver, both the CD player and cassette deck (or MD recorder) will turn off (standby).

Synchronized Recording

Synchronized recording means the cassette deck (or MD recorder) starts recording as soon as a CD or a record begins playing.

To use synchronized recording, follow these steps:

- 1. Put a tape in the cassette deck (or an MD in the MD recorder), and a disc in the CD player (or a record on the turntable).
- 2. Press the record (●) button and the pause (II) button on the cassette deck (or MD recorder) at the same time.

This puts the cassette deck (or MD recorder) into recording pause.

If you do not press the record (\bullet) button and pause (\blacksquare) button at the same time, the synchronized recording feature will not operate.

3. Press the play (►) button on the CD player or on the turntable.

The source changes on the receiver, and as soon as play starts, the cassette deck (or MD recorder) starts recording. When the play ends, the cassette deck (or MD recorder) enters recording pause, and stops about 4 seconds later.

Notes:

- During synchronized recording, the selected source cannot be changed.
- If the power of any component is shut off during synchronized recording, the COMPU LINK remote control system may not operate properly. In this case, you must start again from the beginning.

English

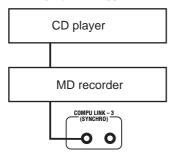
TEXT COMPU LINK Remote Control System

The TEXT COMPU LINK remote control system has been newly developed to deal with the disc information recorded in the CD Text* and MDs. Using these information in the discs, you can operate the CD player or MD recorder equipped with the TEXT COMPU LINK remote control system through the receiver.

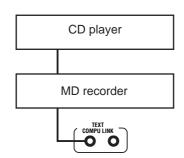
CONNECTIONS:

To use this remote control system, you need to connect the CD player and/or MD recorder you want to operate, following the procedures below.

- 1. If you have already plugged your CD player, MD recorder, and this receiver into the AC outlets, unplug their AC power cords first.
- 2. Connect your CD player, MD recorder, and this receiver as follows, through the COMPU LINK-3 (SYNCHRO) jacks and TEXT COMPU LINK jacks.
 - 1) COMPU LINK-3 (SYNCHRO) jacks: Use the cables with the monaural mini-plugs (not supplied with this receiver).



2) TEXT COMPU LINK jacks: Use the cables with the stereo mini-plugs (not supplied with this receiver).



- 3. Connect your CD player, MD recorder and this receiver, using the cables with RCA pin plugs (see pages 5 and 6).
- 4. Plug the AC power cords of these components above into the AC outlets.
- 5. When turning on these components for the first time, turn on the connected components first, then turn on this receiver.

FUNCTIONS:

This remote control system allows you to use the functions listed below.

Displaying the Disc Information on the TV screen

Disc information such as its performer and disc title (and track titles only when a CD Text is selected) is shown on the TV screen.

Disc Search: Only for CD Player

This remote control system can allow you to search discs by the performer, disc title, and music genre. With this disc search, you can easily find the disc you want to play.

<u>Disc Title Input:</u>

If your CD player or MD recorder has the disc memory function, you can input the following information about the normal audio CDs or MDs on the TV screen.

- · For CDs: Performer, disc title, and music genre
- · For MDs: Disc title and song titles

*What is a CD Text?

In a CD Text, some information about the disc (its disc title, performer, composer, arranger, etc.) is recorded.

Notes:

- If your audio component has two COMPU LINK-3 (SYNCHRO) jacks, you can use either one. If it has only one COMPU LINK-3 (SYNCHRO) jack, connect it so that it is the last item in the series of components. (For example, the CD player in the diagram to the left.)
- If your audio component has two TEXT COMPU LINK jacks, you can use either one. If it has only one TEXT COMPU LINK jack, connect it so that it is the last item in the series of components. (For example, the CD player in the diagram to the left.)
- "TEXT COMPULINK SOURCE NOT CONNECTED" appears on the display in the following cases:
- When the connections explained to the left are not correctly done.
- When you try to use the TEXT COMPU LINK function a few seconds after you turn on the connected equipment. This is not a malfunction of the units.
- Refer also to the manuals supplied with your CD player or MD recorder.

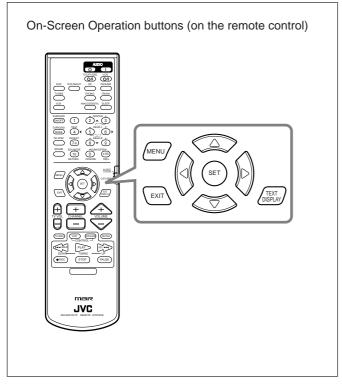
IMPORTANT:

If you turn on the receiver before turning on the other components after connecting the components, the TEXT COMPU LINK remote control system does not work correctly. If this happens:

- 1. Turn off all the components including this receiver.
- 2. Turn on the connected components.
- 3. Turn on this receiver.

OPERATIONS

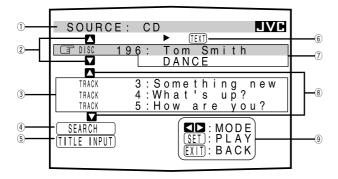
To use this remote control system, you need to connect the TV to the MONITOR OUT jack on the rear panel (see page 7), and set the TV's input mode to the proper position to which the receiver is connected. Make sure you have connected the CD player or MD recorder equipped with the TEXT COMPU LINK remote control system. If not, you cannot use the following functions.



Showing the Disc Information on the TV Screen

Press TEXT DISPLAY while "CD" or "MD" is selected as the source.

The Disc Information screen appears on the TV.



- ① Source name: CD or MD
- (2) Select \blacksquare or \blacksquare , then press SET to change the disc.
- ③ Track numbers and track titles.
 - The current playing (selected) track is indicated in yellow.
 - When you move ☐ to a track number, you can change the track information by pressing </▷. Each time you press the button, track information alternates between its track title and its performer. (You can also start playing the track by pressing SET.)
- ④ Select this (move r in front), then press SET to go to the DISC SEARCH screen (see page 38).
- (5) Select this (move () in front), then press SET to go to the TITLE INPUT screen (see page 39).
- (6) This appears only when a CD Text is selected.
- ⑦ Disc information such as the disc title, performer, and music genre.
 When this is selected (☐ in front), you can change the disc information by pressing <1 / ▷. Each time you press the button, disc information (see "Note on ⑦") changes.
- (8) Select \square or \square , then press SET to change the track.
- Usable buttons and their functions for the current selection.
 Indication here will be changed according to what is

currently selected ((in front) on the screen. See "Note on (9."

Note on ⑦:

- The following information will appear on the display:
- For CD Texts Disc title, Performer, Genre, Song writer, Composer, Arranger, Message Only recorded information will be shown. If there is no data, "NO
- DATA" will appear. • For MDs — Disc title If there is no data, "NO DATA" will appear.

Note on 9:

For example, the SET button will be used to start play (PLAY), to go to the next screen (ENTER), and to determine the selection (ENTER).

To exit from the Disc information screen:

Press EXIT.

Notes:

- The on-screen display will disappear in the following cases: – if no operation is done for about 10 minutes.
 - if you do any operation other than explained in this section.
- To control the MD recorder using the TEXT COMPU LINK remote control system, you have to change the source name shown on the display from "TAPE" to "MD." (See page 13.)
- Some special characters and marks cannot be displayed correctly.

Searching for a Disc (Only for the CD player) Search for a disc by its performer:

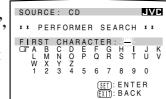
1. Press TEXT DISPLAY while "CD" is selected as the source.

The Disc Information screen appears on the TV.

2. Press $\triangle / \bigtriangledown$ to move **To "SEARCH," then** press SET. The DISC SEARCH screen appears .

SOU	RCE:	CD				J	VC
* *	DIS	C S	SEAF	сн		x	x
	RFORM SC TI		-				
	ŇŘE		-				
M							
					ENTE	R	
			(<u>E</u>)	<u> </u>]]:	ВАСК		

3. Press $\triangle / \bigtriangledown$ to move **T** to "PERFORMER". then press SET. The PERFORMER SEARCH screen appears.



4. Press $\triangle / \bigtriangledown / \lhd / \triangleright$ to move \Box in front of the first character of the performer you want to search, then press SET.

To correct the incorrect entry, press $\triangle / \bigtriangledown / \lhd / \triangleright$ to move (F) in front of the correct character, then press SET.

Note:

Symbols such as @, # or \$ cannot be available for search.

5. Press SET again.

Disc search starts, then the SEARCH RESULT screen, showing the performers, appears.

SOUR	CE: CD	JVC
* *	SEARCH	RESULT **
DISC	81 112 120	TOM RING TIMMY J. TOMMY LARRY T.SMITH TED BROWN
		SET): MODE (SET): GO (EXIT): BACK

6. On the SEARCH RESULT screen, you can do the following:

- Changing the indication of the disc information: Press △ / \bigtriangledown to move \bigcirc to a searched disc, then press \lhd / \triangleright . Each time you press $\triangleleft / \triangleright$, the disc information alternates between its performer and its disc title.
- Starting a disc play and going to the Disc Information screen (see page 37): Press \triangle / ∇ to move \square to a searched disc, then press SET.
- Showing unseen disc information (if more than 5 discs are **listed as a result of the search):** Press \triangle / ∇ until they appear.
- · Going back to the PERFORMER SEARCH screen: Press EXIT.

Search for a disc by its disc title:

1. Press TEXT DISPLAY while "CD" is selected as the source.

The Disc Information screen appears on the TV.

- **2.** Press $\triangle / \bigtriangledown$ to move **To "SEARCH," then** press SET. The DISC SEARCH screen appears.
- **3.** Press \triangle / ∇ to move **T** to "DISC TITLE, then press SET. The DISC TITLE SEARCH screen appears.

SOUR	CE:	CI)			VC
* *	DI	SC	SEAI	асн	x	x
	СТ					
				SET): E I XIT): B A		
SOUR	CE:	CI)			VC
				SEA	RCH	
FIRS FIRS	ISC T C	T HAI	ITLE	ER: GH		К
≭≭ C FIRS C∃ A	ISC TC BC MN		ITLE	ER: GH RS	<u></u>	I K J V

4. Press $\triangle / \bigtriangledown / \lhd / \triangleright$ to move \square in front of the first character of the disc title you want to search, then press SET.

To correct the incorrect entry, press $\triangle / \nabla / \lhd / \triangleright$ to move (F) in front of the correct character, then press SET.

Note:

Symbols such as @, # or \$ cannot be available for search.

5. Press SET again. Disc search starts, then the SEARCH RESULT screen, showing the disc titles, appears.

SOUR	CE: CD	JVL]
* *	SEARCH	IRESULT **	
DISC		BEAUTY BE MY FRIEND BEING BE A MAN BIG SHOT	
		SET): GO (SET): GO (EXIT): BACK	

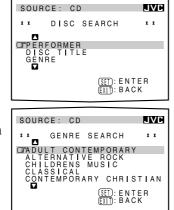
- 6. On the SEARCH RESULT screen, you can do the following:
 - Changing the indication of the disc information: Press △ / \bigtriangledown to move \square to a searched disc, then press $\triangleleft / \triangleright$. Each time you press $\triangleleft / \triangleright$, the disc information alternates between its disc title and its performer.
 - · Starting a disc play and going to the Disc Information screen (see page 37): Press \triangle / ∇ to move \square to a searched disc, then press SET.
 - Showing unseen disc information (if more than 5 discs are **listed as a result of the search**): Press \triangle / ∇ until they appear.
 - Going back to the DISC TITLE SEARCH screen: Press EXIT.

Search for a disc by its genre:

1. Press TEXT DISPLAY while "CD" is selected as the source.

The Disc Information screen appears on the TV.

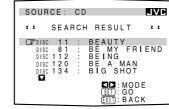
- Press △ / ▽ to move
 To "GENRE", then press SET.
 The GENRE SEARCH screen appears.



4. Press \triangle / ∇ to move \bigcirc to the genre you want to search, then press SET.

To show the unseen genres, press \triangle / ∇ until they appear.

Disc search starts, then the SEARCH RESULT screen, showing the disc titles, appears.



5. On the SEARCH RESULT screen, you can do the following:

- Changing the indication of the disc information: Press △ / \nabla to move ress < / ▷. Each time you press < / ▷, the disc information alternates between its disc title and its performer.
- Starting a disc play and going to the Disc Information screen (see page 37): Press △ / ▽ to move () to a searched disc, then press SET.
- Showing unseen disc information (if more than 5 discs are listed as a result of the search): Press △ / ▽ until they appear.
- Going back to the GENRE SEARCH screen: Press EXIT.

Entering the Disc Information

For the CD Player with the disc memory function:

You can use the disc memory function through this receiver. The disc information (its performer, disc title, and music genre) of normal audio CDs will be stored into the memory built in the CD player.

For the disc memory function, refer to the manual supplied with your CD player.

• The performer, disc title, and music genre information are usually recorded in a CD Text. However, if a CD Text has no genre information recorded in the disc itself, you can input its music genre by yourself.

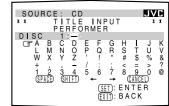
Note:

You can enter the TITLE INPUT screens for a CD Text and input its titles. However, you cannot store the titles you have input for a CD Text.

Example: Entering the following information for Disc 1 Performer: "MICHAEL" Disc title: "MY FAVORITE"

1. Press TEXT DISPLAY while "CD" is selected as the source.

The Disc Information screen appears on the TV.

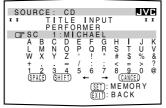


- 3. Press △ / ▽ / ⊲ / ▷ to move ☞ in front of a character you want, then press SET to enter the character.
 - If the current CD is a CD Text, go to step 5 without entering the performer.

To use the lower case letters, press $\triangle / \bigtriangledown / \lhd / \triangleright$ to move \square to (H|F), then press SET.

To use the upper case letters again, press $\triangle / \nabla / \lhd / \triangleright$ to move \bigcirc to \S HIFT, then press SET.

4. Repeat step 3 until you finish putting a performer name (up to 32 characters).



JVC

J U %

JVC

, 0

ENTER BACK

> H S # Ŭ %

(SET): MEMO (EXIT): BACK

·MEMORY

ż

Ġ

To insert a space, press \triangle / ∇ $/ \triangleleft / \triangleright$ to move \Box to (SPACE), then press SET.

To correct an incorrect character:

- 1) Press $\triangle / \nabla / \triangleleft / \triangleright$ to move \Box to \leftarrow or \rightarrow , then press SET until the incorrect character is selected.
- 2) Press $\triangle / \bigtriangledown / \lhd / \triangleright$ to move \square to (ANCEL), then press SET to erase the character.

SOURCE: CD

DISC

TITLE

DOZ B M X

3<u>4</u> (<u>Shif</u>t)

SOURCE: CD ** TITLE INPUT DISC TITLE CFSC I:MY FAVOR A B C D E F G I L M N O P Q R 3 W X Y Z ' ! ! + . . - / ! : . 1 2 3 4 5 6 7 !

3_4 (SH1FT)

1 2 (SPACE)

1 C N Y

TITLE

Ģ

G R

- 3) Press $\triangle / \nabla / \lhd / \triangleright$ to move \bigcirc in front of the correct character, then press SET to enter the correct character.
- 5. Press $\triangle / \bigtriangledown / \lhd / \triangleright$ to move (r to "DISC 1: **MICHAEL** (in this example)," then press SET.

The TITLE INPUT: DISC TITLE screen appears.

- 6. Enter the disc title, referring to steps 3 and 4.
 - If the current CD is a CD Text, go to the next step without entering the disc title.
- 7. Press $\triangle / \bigtriangledown / \lhd / \triangleright$ to move (r to "DISC 1: **MY FAVORITE** (in th example)," then press SET. The TITLE INPUT: DISC 1 GENRE screen appears.

	SOURCE: CD * * TITEL INPUT DISC 1 GENRE	
is	CTADULT CONTEMPOR ALTERNATIVE ROC CHILDRENS MUSIC CLASSICAL CONTEMPORARY CH (SET): E (XII): B	K RISTIAN NTER

8. Press \triangle / ∇ to move \square to the genre you want, then press SET.

The Disc Information screen appears again.

To show the unseen genres, press \triangle / ∇ until they appear.

For the MD recorder:

You can write the disc information (disc title and song titles) into the disc. You can only write the song title for the song currently selected.

- If you have the CD-MD combination deck, you can also enter the disc information (its performer, disc title, and its music genre) of normal audio CDs into the memory built in the CD-MD combination deck. (To do this, follow the procedure of "For the CD Player with the disc memory function" on page 39.)
- If you change the disc or song title with more than 32 characters, the characters following 32nd will be erased from the title.
- 1. Press TEXT DISPLAY while "MD" is selected as the source.

The Disc Information screen appears on the TV.

2. Press $\triangle / \bigtriangledown$ to move **TITLE INPUT,** then press SET. The DISC TITLE INPUT screen appears.



3. Enter the title, referring to steps 3 and 4 of "For the CD Player with the disc memory function" on page 39.

• You can enter up to 32 characters for the disc title.

4. Press $\triangle / \bigtriangledown / \lhd / \triangleright$ to move r to the disc title you have just entered, then press SET. The disc title is stored into the

memory, and the SONG

currently selected song

appears.

TITLE INPUT screen for the

SOUR ** D		MD FITLE	INPUT	
	B C CE M N C X Y 2 2 3 4 CE ©HIE	D P Q Z ! 4 5 6		R

SC * *	DUF	R C E 6 0 1		M E T		. E	IN	۱Pl	JT	JV z	æ *
	A L W + 1 (SPA	B M X 2	1 C N Y .3 SH		EP-/5	F Q : 6		H S # 8 E N B A		JU% >0) R	K>%<®

• You can enter a song title for the song currently selected (indicated in yellow on the TV screen).

5. Enter the song title, referring to steps 3 and 4 of "For the CD Player with the disc memory function" on page 39.

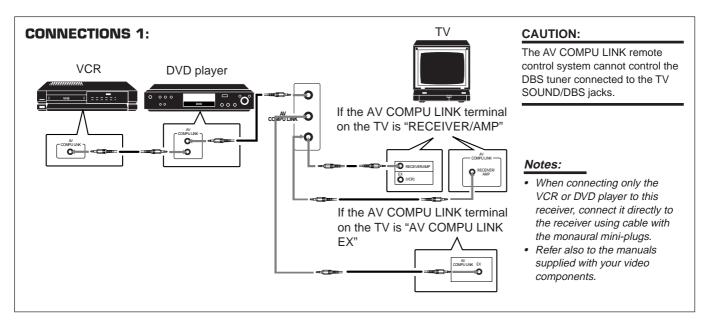
• You can enter up to 32 characters for the song title.

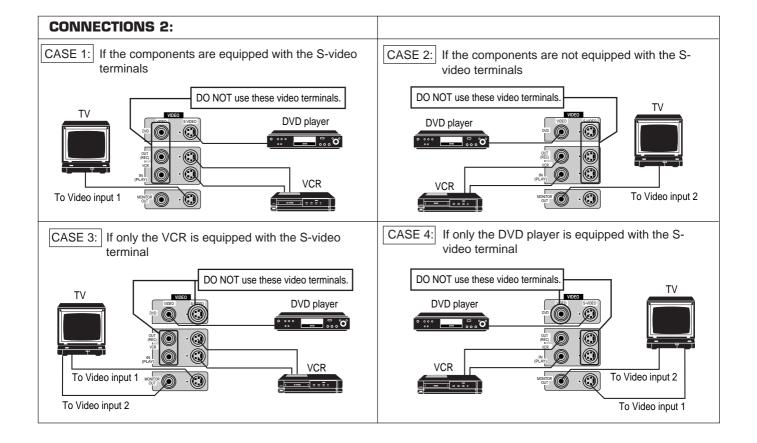
6. Press $\triangle / \bigtriangledown / \lhd / \triangleright$ to move \Box to the song title you have just entered, then press SET. The song title is stored into the memory, and the Disc Information screen appears again.

AV COMPU LINK Remote Control System

The AV COMPU LINK remote control system allows you to operate JVC video components (TV, VCR, and DVD player) through the receiver.

To use this remote control system, you need to connect the video components you want to operate, following the diagrams below and the procedure on the next page.





- 1. If you have already plugged your VCR, DVD player, TV, and this receiver into the AC outlets, unplug their AC power cords first.
- 2. Connect your VCR, DVD player, TV, and this receiver, using the cables with the monaural miniplugs (not supplied).
 - See "CONNECTIONS 1" on the previous page.
- Connect the audio input/output jacks on VCR, DVD player, TV, and this receiver using the cables with RCA pin plug.
 See pages 6 and 7
 - See pages 6 and 7.
- 4. Connect the video input/output jacks on VCR, DVD player, TV, and this receiver, using the cables with RCA pin plug or with S-video plug.
 - See "CONNECTIONS 2" on the previous page.
- 5. Plug the AC power cords of the components into the AC outlets.
- 6. When turning on the TV for the first time after the AV COMPU LINK connection, turn the TV volume to the minimum using the TV volume control on the TV.
- 7. Turn on the other connected components first, then turn on this receiver.
 - When turning on the VCR, use the remote control supplied with this receiver (press VCR ()/).

The AV COMPU LINK remote control system allows you to use the five basic functions listed below.

Remote Control of the TV, DVD player, and VCR Using This Remote Control

See page 45 for details.

For the DVD player and the VCR:

• Aim the remote control directly at **the remote sensor on each component.**

For the TV having AV COMPU LINK terminal "RECEIVER/AMP":

• Aim the remote control directly at **the remote sensor on the receiver.**

For the TV having AV COMPU LINK terminal "AV COMPU LINK EX":

• Aim the remote control directly at the remote sensor on the TV.

One-Touch Video Play

Simply by inserting a video cassette without its safety tab into the VCR, you can enjoy the video playback without setting other switches manually. The receiver automatically turns on and changes the source to "VCR."

The TV automatically turns on and changes the input mode to the position so that you can view the playback picture.

When you insert a video cassette with its safety tab, press the play (►) button on the VCR or on the remote control. So, you can get the same result.

One-Touch DVD Play

Simply by starting playback on the DVD player, you can enjoy the DVD playback without setting other switches manually.

- When the DVD player is connected through the analog input jacks on this receiver (and analog input is selected), the receiver automatically turns on and changes the source to "DVD" or "DVD MULTI."
- When the DVD player is connected through the digital input terminal on this receiver (and digital input is selected), the receiver automatically turns on and changes the source to "DVD DIGITAL."

The TV automatically turns on and changes the input mode to the position so that you can view the playback picture.

Automatic Selection of TV's Input Mode

- When you select "TV SOUND" (or "TV DIGITAL") as the source to play on the receiver, the TV automatically changes the input mode to the TV tuner so that you can watch TV.
- When you select "DVD" (or "DVD DIGITAL"), "DVD MULTI," "VCR," or "DBS" (or "DBS DIGITAL") as the source to play on the receiver, the TV automatically changes the input mode to the appropriate position (either Video Input 1 or Video Input 2) so that you can view the playback picture.

Note:

When you select "TV SOUND" (or "TV DIGITAL") as the source on the receiver, you cannot see the menu on the TV screen since the AV COMPU LINK remote control system automatically changes the TV's input mode to the TV tuner.

If you do not mind stopping listening to the TV sounds, you can then show the on-screen displays after changing the TV's input mode to the appropriate position (either Video Input 1 or Video Input 2) the receiver is connected to.

Automatic Power On/Off

The TV, VCR, and DVD player turn on and off along with the receiver.

When you turn on the receiver;

- If the previously selected source is "VCR," the TV and VCR will turn on automatically.
- If the previously selected source is "TV SOUND" (or "TV DIGITAL") or "DBS" (or "DBS DIGITAL"), only the TV will turn on automatically.
- If the previously selected source is "DVD" (or "DVD DIGITAL") or "DVD MULTI," the TV and DVD player will turn on automatically.

When you turn off the receiver, the TV, VCR and the DVD player will turn off.

Note:

If you turn off the receiver while recording on the VCR, the VCR will not turn off, but continue recording.

Operating JVC's Audio/Video Components

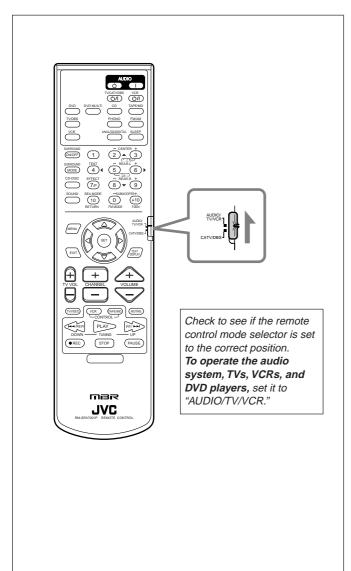
You can operate JVC's audio and video components with this receiver's remote control, since control signals for JVC components are preset in the remote control.

Operating Audio Components

IMPORTANT:

To operate JVC's audio components using this remote control:

- You need to connect JVC audio components through the COMPU LINK-3 (SYNCHRO) jacks (see page 35) in addition to the connections using cables with RCA pin plugs (see pages 5 and 6).
- Aim the remote control directly at the remote sensor on the receiver.
- If you use the buttons on the front panel or the menu function to choose a source, the remote control will not operate that source. To operate a source with the remote control, the source must be selected using source selecting buttons on the remote control.
- To operate the cassette deck or MD recorder using the COMPU LINK remote control system, set the source name correctly. (See page 13.)
- Refer also to the manuals supplied with your components.



<u>Tuner</u>

You can always perform the following operations (with the remote control mode selector set to "AUDIO/TV/VCR"):

FM/AM: Alternates between FM and AM.

After pressing FM/AM (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations:

1 – 10, +10:	Selects a preset channel number directly.
	For channel number 5, press 5.
	For channel number 15, press $+10$, then 5.
	For channel number 20, press +10, then 10.
TUNING UP/T	UNING DOWN:
	Tunes into stations.
FM MODE:	Changes the FM reception mode.

Sound control section (Amplifier)

You can always perform the following operations (with the remote control mode selector set to "AUDIO/TV/VCR"):

SURROUND ON/OFF:	Turns on or off the Surround modes —
	Dolby Pro Logic, Dolby Digital, DTS
	Digital Surround and MPEG
	Multichannel.
SURROUND MODE:	Selects the DSP modes.

After pressing SOUND (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations:

Changes the SEA modes.
Adjusts the subwoofer output level.
Adjusts the center speaker output level.
Adjusts the left rear speaker output level.
Adjusts the right rear speaker output level.
Selects the effect level.
Turns on or off the test tone output.

Note:

After adjusting sounds, press the corresponding source selecting button or CD-DISC to operate your target source by using the 10 keys; otherwise, the 10 keys cannot be used for operating your target source.

CD player

After pressing CD (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations on the CD player:

PLAY:	Starts playing.
 ◀◀:	Returns to the beginning of the current (or
	previous) track.
	Skips to the beginning of the next track.
STOP:	Stops playing.
PAUSE:	Pauses playing. To release it, press PLAY.
1 – 10, +10:	Selects a track number directly.
	For track number 5, press 5.
	For track number 15, press +10, then 5.
	For track number 20, press $+10$, then 10.
	For track number 30, press $+10$, $+10$, then 10.

CD player-changer

After pressing CD-DISC (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations on a CD player-changer:

PLAY:	Starts playing.
◀◀:	Returns to the beginning of the current (or previous)
	track.
	Skips to the beginning of the next track.
STOP:	Stops playing.
PAUSE:	Pauses playing. To release it, press PLAY.
1 – 6, 7/P:	Selects the number of a disc installed in a CD
	player-changer.

After pressing CD (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations on the CD player-changer:

1 – 10, +10:	Selects a track number directly.
	For track number 5, press 5.
	For track number 15, press +10, then 5.
	For track number 20, press +10, then 10.
	For track number 30, press $+10$, $+10$, then 10.

<u>Turntable</u>

After pressing PHONO (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations on a turntable:

PLAY:	Starts playing.
STOP:	Stops operations.

<u>Cassette deck</u>

After pressing TAPE/MD or TAPE/MD CONTROL (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations on a cassette deck:

PLAY: ◀◀:	Starts playing. Fast winds the tape from right to left.
	· ·
	Fast winds the tape from left to right.
STOP:	Stops operations.
PAUSE:	Pauses playing. To release it, press PLAY.
• REC:	Press this button with the PLAY button to start recording.
	Press this button with the PAUSE button to enter
	recording pause.

<u>MD recorder</u>

After pressing TAPE/MD or TAPE/MD CONTROL (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations on the MD recorder:

PLAY:	Starts playing.
◀◀:	Returns to the beginning of the current (or previous)
	track.
	Skips to the beginning of the next track.
STOP:	Stops playing.
PAUSE:	Pauses playing. To release it, press PLAY.
REC:	Press this button with the PLAY button to start
	recording.
	Press this button with the PAUSE button to enter
	recording pause.

Note:

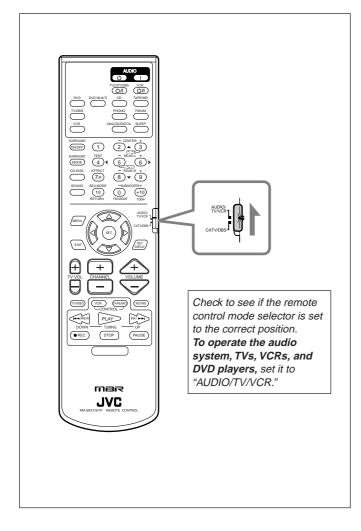
You can use either TAPE/MD button or the TAPE/MD CONTROL button to activate the buttons listed above. If you press TAPE/MD, the playing source also changes. On the other hand, if you press TAPE/ MD CONTROL, the playing source does not change.

Operating Video Components

IMPORTANT:

- To operate JVC's video components using this remote control:
- You need to connect JVC video components through the AV COMPU LINK terminals (see page 41) in addition to the connections using cables with RCA pin plugs (see pages 6 and 7).
- Some JVC VCRs can accept two types of the control signals

 remote code "A" and "B." Before using this remote control, make sure that the remote control code of the VCR is set to code "A."
- When using the remote control:
 - For the DVD player and VCR operations, aim the remote control directly at the remote sensor on each component, not on the receiver.
 - For the TV operations:
 - If the TV has the AV COMPU LINK terminal "RECEIVER/AMP," aim the remote control directly at the remote sensor on the receiver.
 - If the TV has the AV COMPU LINK terminal "AV COMPU LINK EX," aim the remote control directly at the remote sensor on the TV.



VCR

You can always perform the following operations (with the remote control mode selector set to "AUDIO/TV/VCR"):

VCR U/I: Turns on or off the VCR.

After pressing VCR or VCR CONTROL (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations on the VCR:

1 – 9, 0:	Selects the TV channels on VCR.
PLAY:	Starts playing.
44 :	Rewinds a tape.
	Fast winds a tape.
STOP:	Stops operations.
PAUSE:	Pauses playing. To release it, press PLAY.
• REC:	Press this button with the PLAY button to start
	recording.
	Press this button with the PAUSE button to enter
	recording pause.

CHANNEL +/-: Changes the TV channels on the VCR.

Note:

You can use either VCR button or the VCR CONTROL button to activate the buttons listed above. If you press VCR, the playing source also changes. On the other hand, if you press VCR CONTROL, the playing source does not change.

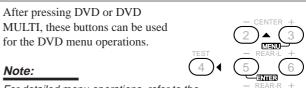
DVD player

After pressing DVD or DVD MULTI (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations on a DVD player:

PLAY: Starts playing.

- Returns to the beginning of the current (or previous) track.
- \blacktriangleright : Skips to the beginning of the next track.
- STOP: Stops playing.

PAUSE: Stops playing temporarily. To release it, press PLAY.



For detailed menu operations, refer to the instructions supplied with the discs or the DVD player.

TV

You can always perform the following operations (with the remote control mode selector set to "AUDIO/TV/VCR"):

TV/CATV/DBS ᢕ/I	: Turns on or off the TV.
TV VOL +/:	Adjusts the volume.
TV/VIDEO:	Sets the input mode (either TV or VIDEO).

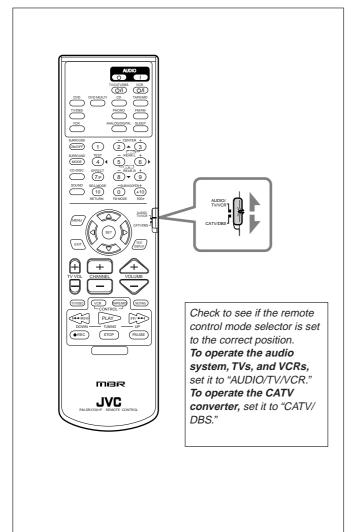
After pressing TV/DBS (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations on a TV:

CHANNEL +/:	Changes the channels.
1 – 9, 0, 100+:	Selects the channels.
RETURN:	Alternates between the previously selected
	channel and the current channel.

Operating Other Manufacturers' Video Equipment -

This remote control supplied with the receiver can transmit control signals for other manufacturers' VCRs, TVs, CATV converters and DBS tuners. By changing the transmittable signals from preset ones to the other manufacturers', you can operate the other manufacturer's components using this remote control.

When operating the other manufacturers' components, refer also to the manuals supplied with them. To operate these components with the remote control, first you need to set the manufacturer's code each for VCR, TV, CATV converters and DBS tuners.



To change the transmittable signals for operating another manufacturer's TV

- 1. Set the remote control mode to "AUDIO/TV/ VCR."
- 2. Press and hold TV/CATV/DBS U/l.
- 3. Press TV/DBS.
- 4. Enter manufacturer's code (three digits) using buttons 1 9, and 0.

See the list on pages 48 and 49 to find the code.

Examples: For a JVC product, press 0, 3, then 6. For a Sony product, press 0, 0, then 0.

5. Release TV/CATV/DBS U/I.

The following buttons can be used for operating the TV (with the remote control mode selector set to "AUDIO/TV/VCR"):

 TV/CATV/DBS
 O/I:
 Turns on and off the TV.

 TV VOL +/-:
 Adjusts the volume.

 TV/VIDEO:
 Sets the input mode (either TV or VIDEO).

After pressing TV/DBS (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations on a TV:

CHANNEL +/-: Changes the channels.

1 – 10, 0, 100+ (+10): Selects the channels. The 100+ (+10) button will function as the ENTER button if your TV requires pressing ENTER after selecting a channel number.

Note:

Refer to the manual supplied with your TV.

6. Try to operate your TV by pressing TV/CATV/

DBS 心川.

When your TV turns on or off, you have entered the correct code.

If there are more than one code listed for your brand of TV, try each one until the correct one is entered.

To change the transmittable signals for operating a CATV converter or DBS tuner

- 1. Set the remote control mode to "CATV/DBS."
- 2. Press and hold TV/CATV/DBS U/I.
- 3. Press TV/DBS.
- 4. Enter manufacturer's code (three digits) using buttons 1 9, and 0.

See the list on pages 49 and 50 to find the code.

Examples: For a Toshiba product, press 0, 0, then 0. For a Samsung product, press 7, 0, then 2.

5. Release TV/CATV/DBS ()/I.

After setting the remote control mode selector to "CATV/DBS," you can perform the following operations on the CATV convertor or on the DBS tuner:

TV/CATV/DBS ᢕ/I:	Turns on and off the CATV converter
	or the DBS tuner.
CHANNEL +/:	Changes the channels.
1 – 10, 0, 100+ (+10):	Selects the channels.
	The $100+(+10)$ button will function as
	the ENTER button if your equipment
	requires pressing ENTER after
	selecting a channel number.

Note:

Refer to the manual supplied with your CATV converter or DBS tuner.

6. Try to operate your CATV converter or DBS tuner by pressing TV/CATV/DBS 0/1.

When your CATV converter or DBS tuner turns on or off, you have entered the correct code.

If there are more than one code listed for your brand of CATV converter or DBS tuner, try each one until the correct one is entered.

To change the transmittable signals for operating another manufacturer's VCR

- 1. Set the remote control mode to "AUDIO/TV/ VCR."
- 2. Press and hold VCR U/l.
- 3. Press VCR.
- 4. Enter manufacturer's code (three digits) using buttons 1 9, and 0.

See the list on pages 50 and 51 to find the code.

Examples: For a JVC product, press 0, 0, then 8. For an NEC product, press 0, 3, then 8.

5. Release VCR U/I.

The following button can be used for operating the VCR (with the remote control mode selector set to "AUDIO/TV/VCR"):

VCR U/I: Turns on and off the VCR.

After pressing VCR or VCR CONTROL (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations on the VCR:

CHANNEL +/:	Changes the TV channels on the
1 – 10, 0, 100+ (+10):	VCR. Selects the TV channels. The 100+ (+10) button will function as the ENTER button if your VCR
	requires pressing ENTER after selecting a channel number.
PLAY:	Starts playback.
44 :	Rewinds a video tape.
	Fast winds a video tape.
STOP:	Stops operation.
PAUSE:	Pauses.
REC:	Starts recording or enters recording
	pause.

Notes:

- Refer to the manual supplied with your VCR.
- You can use either VCR button or the VCR CONTROL button to activate the buttons listed above. If you press VCR, the playing source also changes. On the other hand, if you press VCR CONTROL, the playing source does not change.
- 6. Try to operate your VCR by pressing VCR ()/I. When your VCR turns on or off, you have entered the correct code.

If there are more than one code listed for your brand of VCR, try each one until the correct one is entered.

English

Manufacturers' codes for TV

Manufacturers	codes for TV		
A-Mark	003	Finlux	037
Acura	009	Firstline	009, 216
Admiral	093	Fisher	154, 208
Aiko	092	Formenti	037
Akai	030, 208	Fortress	093
	264	Frontech	264
Akura		Funai	264, 342
Alaron	216	GE	-
Alba	009, 036, 037		047, 093, 178, 451
Amstrad	009, 037	GEC	037
Anam	003, 004, 009, 068, 161, 250, 425, 426	Geloso	009
Anam National	161, 250, 425	General	186
Anitech	009, 068	Gibralter	030
AOC	003, 030	GoldStar	001, 002, 030, 037, 039, 178, 283, 409,
Arcam	216		457, 467
Archer	003	Goodmans	036, 037
Audinac	391	Gradiente	053, 170
Audiosonic	037	Granada	037, 208, 502
Audiovox	003, 092, 451	Grundig	037, 535, 554
Basic Line	009	Hallmark	178
Baur	037, 535, 554	Hanseatic	037
Bell & Howell	154	Harman/Kardon	054
Beon	037	Harvard	068
Blaupunkt	535, 554	HCM	009
Britannia	216	Hinari	009, 036, 037, 283
Broksonic	003, 426	Hitachi	036, 145, 409, 576
Bush	009, 036, 037	Huanyu	216
Candle	030, 186	Hypson	037, 264
Carnivale	030	ICE	264
Carrefour	036	Indiana	037
Carver	054, 170	Infinity	054
Cascade	009	Inkel	571
Cathay	037	Interbuy	068
CCE	037	Interfunk	037
Celebrity	000	Intervision	037, 068, 264
Centurion	037	ITT	283
Cimline	009	JBL	054
Cineral	092, 451	JCB	000
Citizen	030, 039, 060, 092, 186	JEC	502
Clarivox	037	JVC	036, 053, 069, 160
Contec	009, 036, 216	Kaisui	009, 216
Continental Edison	489	Kamp	216
Craig	161	Kawasho	216
Crosley	054	Kendo	037
Crown	009, 037, 039	Kenwood	030
CS Electronics	216	Kingsley	216
		Korpel	037
Curtis Mathes	030, 039, 047, 054, 060, 093, 145, 154,	Koyoda	009
Deeuvee	166, 451 009, 037, 039, 066, 092, 154, 391, 402,	KTV	030, 039
Daewoo		Leyco	037, 264
Danaai	451	Liesenk & Tter	037
Dansai	037		001
Dayton	009	Logik LXI	
De Graaf	208		047, 054, 154, 156, 178
Decca	037	M Electronic	009, 037, 068
Denon	145	Magnavox	030, 036, 054, 186
Dixi	004, 009, 037	Manesth	264
ECE	037	Marantz	030, 037, 054
Ectec	391	Mark	037
Electroband	000	Maruman	391
Electrohome	409	Matsui	009, 036, 037, 208
Elin	037	Matsushita	250
Elta	009	Mediator	037
Emerson	039, 154, 178	Megatron	003, 145, 178
Envision	030	Memorex	009, 150, 154, 178, 250
Erres	037	Metz	535
Etron	009, 283	MGA	030, 150, 178
Ferguson	037, 560	Midland	039, 047
Fidelity	216	Minerva	535, 554
Finlandia	208	Mitsubishi	036, 093, 150, 178, 535
		-	

Mivar
Motorola
MTC
Multitech
NAD
National
NEC
Neckermann
NEI
Nicamagic
Nikkai
Nikko
Nisato
No release a de
Nordmende
NTC
Optimus
Optonica
optornou
Orion
Osaki
Otto Versand
Panama
Panasonic
Pathe Cinema
Pausa
Penney
Philco
Philips
Phonola
Pilot
Pioneer
Portland
Profex
Proscan
Protech
Proton
Quasar
Quelle
Queile
Questa
R-Line
Radio Shack
Radiola
Rank Arena
RCA
Realistic
Revox
-
Rex
Rex
Rex Rhapsody
Rhapsody
Rhapsody Roadstar
Rhapsody
Rhapsody Roadstar Runco
Rhapsody Roadstar Runco Saisho
Rhapsody Roadstar Runco Saisho
Rhapsody Roadstar Runco Saisho Sampo
Rhapsody Roadstar Runco Saisho
Rhapsody Roadstar Runco Saisho Sampo
Rhapsody Roadstar Runco Saisho Sampo Samsung
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux Sandra
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux Sandra Sansei
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux Sandra Sansei
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux Sandra Sansei Sanyo
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux Sandra Sansei
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux Sandra Sansei Sanyo SBR
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux Sandra Sansei Sanyo SBR Schneider
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux Sandra Sansei Sanyo SBR Schneider Scotch
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux Sandra Sansei Sanyo SBR Schneider Scotch
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux Sandra Sansei Sanyo SBR Schneider Scotch Scott
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux Sandra Sansei Sanyo SBR Schneider Scotch
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux Sandra Sansei Sanyo SBR Schneider Scotch Scott Sears
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux Sandra Sansei Sanyo SBR Schneider Scotch Scott Sears SEG
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux Sandra Sansei Sanyo SBR Schneider Scotch Scott Sears SEG Semp
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux Sandra Sansei Sanyo SBR Schneider Scotch Scott Sears SEG Semp
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux Sandra Sansei Sanyo SBR Schneider Scotch Scott Sears SEG Semp Sentra
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux Sandra Sansei Sanyo SBR Schneider Scotch Scott Sears SEG Semp
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux Sandra Sansei Sanyo SBR Schneider Scotch Scott Sears SEG Semp Sentra Sharp
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux Sandra Sansei Sanyo SBR Schneider Scotch Scott Sears SEG Semp Sentra Sharp Siemens
Rhapsody Roadstar Runco Saisho Sampo Samsung Samsux Sandra Sansei Sanyo SBR Schneider Scotch Scott Sears SEG Semp Sentra Sharp

216 093 030, 060, 216 009, 216 156, 166, 178 226 030, 036, 170 037, 554 037 216 037, 216, 264 030, 092, 178 391 560 092 154, 166, 250 093 037 264 036, 037, 535, 554 264 161, 226, 250 216 009 002, 003, 030, 039, 047, 060, 156, 178 030, 054, 145 037, 054, 554 037 030, 039 166 039, 092 009 047 009, 037, 264 003, 178 250 037, 252, 535, 554 036 037 030, 039, 047, 154, 178, 409 037 036 047, 090, 093 030, 039, 154, 178 037 264 216 009, 264 030 009, 264 030, 039 009, 030, 037, 039, 060, 090, 178, 264, 427 039 216 451 036, 154, 208, 376, 424 037 037 178 178 047, 054, 154, 156, 178 036, 264 156 283 036, 039, 093, 256 037, 535, 554 036

Simpson	186
Sky-Worth	037
Sonitron	208
Sonoko	009, 037
Sonolor	208
Sontec	037
Sony	000, 036
Soundesign	178, 186
Soundwave	037
Spectricon	003
Standard	009
SuperTech	216
Supreme	000
Sylvania	030, 054
Sysline	037
Tandy	093
Tashiko	036
Tatung	003, 037
Technics	250
Techwood	003
Teknika	039, 054, 060, 092, 150, 186
Telefunken	252
Teletech	009
Teleton	186
Texet	216
Thomson	489, 560
Thorn	037, 535
TMK	178
Toshiba	036, 060, 154, 156, 241, 502
Totevision	039
Ultra	391
Universum	037, 264, 535
Vector Research	030
Vestel	037
Victor	036, 053, 160, 250, 376
Vidikron	054
Vidtech	036, 178
Wards	030, 054, 178
Watson	037
Wega	036
White Westinghouse	037, 216
Yamaha	030
Yoko	037, 264
Zenith	092
Zonda	003

Manufacturers' codes for CATV converters

ABC	008
Daeryung	008
GoldStar	838
LG Alps	779
Memorex	000
Now	776
Panasonic	000
Paragon	000
Pulsar	000
Quasar	000
Runco	000
Samsung	702
Scientific Atlanta	008
Seawoo	780
TongKook	777, 840
Toshiba	000
Zenith	000

English

Manufacturers' codes for DBS tuner

Cyrus	200
Dae Young	735
DNT	200
DX Antenna	752
Kathrein	200
Marantz	200
Panasonic	739
Pantech	747
Philips	200
Radiola	200
RFT	200
Samsung	773
Sony	661
Toshiba	486
Ventana	200

Manufacturers' codes for VCR

Admiral	048
Adventura	000
Aiko	278
Aiwa	000, 037
Akai	041, 061, 281, 288
Akiba	072
Alba	020, 072, 278
Ambassador	020
Amstrad	000, 278
Anam	037, 162, 226, 240, 278, 553
Anam National	162, 226
Anitech	072
ASA	037, 081
Asha	240
Asuka	037
Audiovox	037
Baird	000, 041, 104
Basic Line	020, 072, 278
Beaumark	240
Bell & Howell	104
Blaupunkt	034, 162, 195, 226, 227
Brandt	187, 320
Brandt Electronic	041
Bush	072, 278
Calix	037
Capehart	020
Carver	081
Catron	020
CCE	072, 278
CGE	000
Cimline	072
Cineral	278
Citizen	037, 278
Clatronic	020
Colt	072
Condor	020
Craig	037, 072, 240
Crown	020, 072, 278
Curtis Mathes	041, 162
Cybernex	240
Cyrus	081
Daewoo	020, 045, 046, 278, 368
Dansai	072
Daytron	020
De Graaf	042, 166
Decca	000, 081
Denon	042

Dual 041 Dumont 000, 081, 104 Dynatech 000 Elbe 038 Elcatech 072 Electrohome 037 Electrophonic 037 Emerex 032 000, 037, 043, 061, 278 Emerson 240.278 ESC Ferguson 041, 320 Fidelity 000 Finlandia 081, 104 Finlux 000, 042, 081, 104 Firstline 037, 043, 045, 072 Fisher 046, 104 Frontech 020 Fuji 033 Funai 000 Garrard 000 048, 240 GE GEC 081 General 020, 052 Go Video 432 GoldHand 072 GoldStar 037, 038, 225, 471 Goodmans 000, 020, 037, 062, 072, 278 Gradiente 000, 008 Graetz 041, 104, 240 046, 081, 104 Granada Grandin 000, 037, 072 Grundig 072, 081, 195, 226 Hanseatic 037 Harley Davidson 000 Harman/Kardon 038, 081 Harwood 072 HCM 072 Headquarter 046 Hinari 072, 240 Hitachi 000, 041, 042, 166, 235, 240 Hypson 072 Imperial 000 Interfunk 081 ITT 041, 046, 104, 240, 384 ITV 037, 278 Jensen 041 008, 041, 067, 384 JVC Kaisui 072 KEC 037, 278 038, 041, 067, 384 Kenwood KLH 072 Kodak 037 Korpel 072 278 Lenco 072 Leyco 000 Lloyd's Loewe 037, 081, 162 Logik 072, 240 043, 046, 048, 062, 104 Luxor LXI 037 M Electronic 000 Magnasonic 278 Magnavox 000, 081 Magnin 240 Manesth 045,072 Marantz 062, 081 Marta 037 Matsushita 162, 227

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Melectronic Memorex Memphis Metz MGA MGN Technology Minerva Minolta Mitsubishi Motorola MTC Multitech Murphy NAD National NEC Neckermann Nesco Nikko Nikon Noblex Nokia Nordmende Oceanic Olympus Optimus Optonica Osaki Otto Versand Palladium Panasonic Pathe Marconi Penney Pentax Perdio Philco Philips Phonola Pilot Pioneer Portland Profitronic Proline Protec Pve Quarter Quartz Quasar Quelle Radio Shack Radiola Radix Randex RCA Realistic Rex Ricoh Roadstar Saba Salora Samsung Sanky Sansui Sanyo SBR Schaub Lorenz Schneider Scott

038 000, 037, 046, 048, 104, 162, 240 072 037, 162, 195, 227 043, 061, 240 240 195 042 043, 048, 061, 067, 081, 173, 196 048 000, 240 000,072 000 058 226 038, 040, 041, 067, 104, 370 081 072 037 034 240 041, 046, 104, 240 041, 320, 384 000, 041 226 037, 048, 058, 104, 162, 432 062 000, 037, 072 081 037, 041, 072 162, 225, 226, 227, 367 041 037, 038, 040, 042, 240 042 000 038 062, 081, 384 081 037 058, 067, 081, 162, 235 020 240 000 072 081 046 046 162 081 000, 037 081 037 037 042, 048, 240 000, 037, 046, 048, 062, 104 041, 384 034 037, 072, 240, 278 041, 320, 384 043,046 045, 240, 426, 432 048 000, 041, 067 046, 104, 240, 368, 369 081 000, 041, 104 000, 072, 081 043, 045

Sears 000, 037, 042, 046, 104 SEG 240 SEI 081 041 Seleco Semp 045 Sentra 020 048, 062, 363 Sharp Shintom 072, 104 Shogun 240 037, 081, 104, 195 Siemens Silva 037 Singer 045,072 Sinudyne 081 Solavox 020 Sonolor 046 Sontec 037 Sony 000, 032, 033, 034 STS 042 Sunstar 000 Suntronic 000 Sylvania 000, 043, 081 Symphonic 000 000 Tashiko 000, 041, 081 Tatung Teac 000, 041 Tec 020 Technics 162, 226 Teknika 000, 037, 052 Teleavia 041 Telefunken 041, 187, 320, 384 Tenosal 072 Tensai 000 Thomas 000 041, 320, 384 Thomson Thorn 041, 104 TMK 240 Toshiba 041, 043, 045, 081, 366, 384 Totevision 037, 240 240 Uher Unitech 240 000, 037, 081, 195, 240 Universum Vector 045 Vector Research 038, 040 008, 041, 067, 384 Victor Video Concepts 040, 045, 061 Videosonic 240 Wards 000, 042, 048, 062, 072, 081, 240 White Westinghouse 278 XR-1000 000,072 Yamaha 038 Yamishi 072 Yokan 072 Yoko 020, 240 Zenith 000, 033, 034

Manufacturers' codes listed on pages 48 to 51 are subject to change without notice. If they are changed, this remote control cannot operate the equipment.

Troubleshooting -

Use this chart to help you solve daily operational problems. If there is any problem you cannot solve, contact your JVC service center.

PROBLEM	POSSIBLE CAUSE	SOLUTION
The display does not light up.	The power cord is not plugged in.	Plug the power cord into an AC outlet.
No sound from speakers.	Speaker signal cables are not connected.	Check speaker wiring and reconnect if necessary.
	The SPEAKERS 1 and 2 buttons are not set correctly.	Press SPEAKERS 1 and 2 correctly.
	An incorrect source is selected.	Select the correct source.
	Muting is activated.	Press MUTING to cancel the mute.
Sound from one speaker only.	Speaker signal cables are not connected properly.	Check speaker wiring and reconnect if necessary.
	The balance is set to one extreme.	Adjust the balance properly (see page 13).
Continuous hiss or buzzing during FM reception.	Incoming signal is too weak.	Connect an outdoor FM antenna or contact your dealer.
	The station is too far away.	Select a new station.
	An incorrect antenna is used.	Check with your dealer to be sure you have the correct antenna.
	Antennas are not connected properly.	Check connections.
Occasional cracking noise during FM reception.	Ignition noise from automobiles.	Move the antenna farther from automobile traffic.
No colors on the on-screen display.	The color system of the connected TV is not PAL.	Connect a PAL- or multi-color system TV.
Howling during record playing.	Your turntable is too close to speakers.	Move speakers away from the turntable.
"OVERLOAD" starts flashing on the display.	Speakers are overloaded because of high volume.	 Press STANDBY/ON O'l on the front panel to turn off the receiver. Stop the playback source. Turn on the receiver again, and adjust the volume.
	Speakers are overloaded because of short circuit of speaker terminals.	Press STANDBY/ON (b) / on the front panel, then check the speaker wiring. If "OVERLOAD" does not disappear, unplug the AC power cord, then plug it back again. If speaker wiring is not short-circuited, contact your dealer.
Remote control does not work.	The remote control mode selector is not set correctly.	Set the selector correctly either to "AUDIO/ TV/VCR" or to "CATV/DBS."
	There is an obstruction in front of the remote sensor on the receiver.	Remove the obstruction.
	Batteries are weak.	Replace batteries.

Specifications

Amplifier

```
Output Power
                                                  At Stereo operation:
                                                  Front channels:
                                                                          100 W* per channel, min. RMS, both channels driven into 8 \Omega at
                                                                          1 kHz with no more than 0.9% total harmonic distortion.
                                                                         (IEC268-3/DIN)
                                                  At Surround operation:
                                                  Front channels:
                                                                          100 W* per channel, min. RMS, driven into 8 \Omega at 1 kHz with no
                                                                         more than 0.8% total harmonic distortion.
                                                  Center channel:
                                                                          100 W*, min. RMS, driven into 8 \Omega at 1 kHz, with no more than
                                                                         0.8% total harmonic distortion.
                                                  Rear channels
                                                                          100 W* per channel, min. RMS, driven into 8 \Omega at 1 kHz, with no
                                                                         more than 0.8% total harmonic distortion.
                                                  (* Measured on AC 110 V, 127 V, 220 V and 240 V)
Audio
   Audio Input Sensitivity/Impedance (1 kHz):
                                                  PHONO (MM):
                                                                                               2.5\;mV/47\;k\Omega
                                                  CD, TAPE/MD, TV SOUND/DBS, VCR, DVD:
                                                                                               200 \text{ mV}/47 \text{ k}\Omega
                Audio Input (DIGITAL IN)* :
                                                  Coaxial: DIGITAL 1 (DVD):
                                                                                               0.5 V(p-p)/75 Ω
                                                  Optical: DIGITAL 2 (CD), DIGITAL 3 (TV):
                                                                                               -21 \text{ dBm to} -15 \text{ dBm} (660 \text{ nm} \pm 30 \text{ nm})
                                                  *Corresponding to Linear PCM, Dolby Digital, DTS Digital Surround and MPEG
                                                   Multichannel (with sampling frequency — 32 kHz, 44.1 kHz, 48 kHz).
                                                  TAPE/MD, VCR:
                                                                                               200 mV
                          Audio Output Level:
                                                  Optical: DIGITAL OUTPUT
                               Digital output:
                                                            Signal wave length: 660 nm
                                                            Output level: -21 dBm to -15 dBm
         Signal-to-Noise Ratio ('66 IHF/DIN):
                                                  PHONO:
                                                                                               70 dB/66 dB (at REC OUT)
                                                  CD, TAPE/MD, TV SOUND/DBS, VCR, DVD:
                                                                                               87 dB/67 dB
                   Frequency Response (8 \Omega):
                                                  PHONO:
                                                                                               20 Hz to 20 kHz (±1 dB)
                                                  CD, TAPE/MD, TV SOUND/DBS, VCR, DVD:
                                                                                               20 Hz to 20 kHz (±1 dB)
                   RIAA Phono Equalization:
                                                  \pm 1.0 dB (20 Hz to 20 kHz)
                                   Bass boost:
                                                  +6 \text{ dB} \pm 1.0 \text{ dB} at 100 Hz (Volume control at -30 \text{ dB})
                                         SEA:
                                                  Center frequencies:
                                                                         100 Hz, 1 kHz, 10 kHz
                                                  Control range:
                                                                         \pm 10 \text{ dB} \pm 2 \text{ dB}
Video
           Video Input Sensitivity/Impedance:
                                                                                                            1 V(p-p)/75 Ω
                                                  TV SOUND/DBS, VCR, DVD:
                            Composite video:
                                                                                                            1 V(p-p)/75 \Omega
                                     S-video:
                                                  TV SOUND/DBS, VCR, DVD: (Y: luminance):
                                                                                   (C: chrominance, burst): 0.286 V(p-p)/75 \Omega
                          Video Output Level:
                             Composite video:
                                                  VCR. MONITOR OUT:
                                                                                                            1 \text{ V(p-p)}/75 \Omega
                                      S-video:
                                                  VCR, MONITOR OUT:
                                                                                   (Y: luminance):
                                                                                                            1 V(p-p)/75 Ω
                                                                                   (C: chrominance, burst): 0.286 V(p-p)/75 Ω
                                                  Negative
                             Synchronization:
```

Signal-to-Noise Ratio:

On-Screen Color System:

45 dB

PAL

FM tuner (IHF)

Tuning Range:	87.50 MHz to 108.00	MHz
Usable Sensitivity:	Monaural:	12.8 dBf (1.2 $\mu V/75~\Omega)$
50 dB Quieting Sensitivity:	Monaural: Stereo:	21.3 dBf (3.2 μV/75 Ω) 41.3 dBf (31.5 μV/75 Ω)
Signal-to-Noise Ratio (IHF-A weighted):	Monaural: Stereo:	78 dB at 85 dBf 73 dB at 85 dBf
Total Harmonic Distortion:	Monaural: Stereo:	0.4% at 1 kHz 0.6% at 1 kHz
Stereo Separation at REC OUT:	35 dB at 1 kHz	
Alternate Channel Selectivity:	45 dB: (±400 kHz)	
Frequency Response:	30 Hz to 15 kHz: (+0.	5 dB, -3 dB)
AM tuner		
Tuning Range:	531 kHz to 1 602 kHz 530 kHz to 1 600 kHz	
Usable Sensitivity:		
	Loop antenna	$400 \ \mu V/m$
Signal-to-Noise Ratio	Loop antenna	400 μV/m 50 dB (100 mV/m)
	Loop antenna	·
	Loop antenna	·
Signal-to-Noise Ratio	AC 110 V/127 V/220	50 dB (100 mV/m)

Power Consumption:	5 W (in standby mode)
Dimensions (W x H x D):	435 mm x 157 mm x 412.5 mm
Mass:	11. 3kg

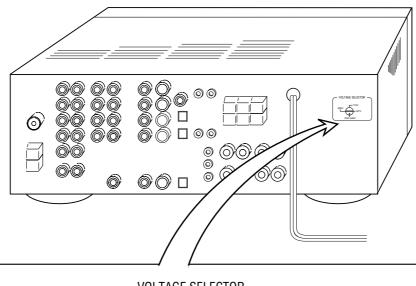
Designs & specifications are subject to change without notice.

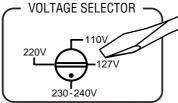
Mains (AC) Line Instruction (not applicable for Europe, U.S.A., Canada, Australia and U.K.)

Instrucción sobre la línea de la red (CA) (no aplicable para Europa, EE.UU., Canadá, Australia, ni el Reino Unido)

Instrução sobre a tensão da rede eléctrica (CA) (não aplicável para a Europa, os E.U.A., o Canadá, a Austrália e o Reino Unido)

主(AC)电源线路说明(不适用于欧洲、美国、加拿大、澳洲及英国型号)





CAUTION for mains (AC) line

BEFORE PLUGGING IN, do check that your mains (AC) line voltage corresponds with the position of the voltage selector switch provided on the outside of this equipment and, if different, reset the voltage selector switch, to prevent from a damage or risk of fire/electric shock.

PRECAUCIÓN para la línea de la red (CA)

ANTES DE ENCHUFAR EL EQUIPO, compruebe si la tensión de la línea de la red (CA) corresponde con la posición del selector de tensión situado en la parte exterior del equipo, y si es diferente, reajuste el selector de tensión para evitar el riesgo de incendios/ descargas eléctricas.

PRECAUÇÃO para a ligação à tensão da rede (CA)

ANTES DE LIGAR O APARELHO A UMA TOMADA DA REDE, verifique se a tensão da rede CA corresponde à posição do selector de voltagem localizado na parte externa deste equipamento. Caso não corresponda, reajuste o selector de voltagem a fim de evitar avarias ou riscos de incêndio e choque eléctrico.

有关主(AC)电源线路的注意事项

接插电源以前,务请检查当地的主 (AC) 电源线路电压是 否和位于本机外面的电压选择开关设定的位置一致。如果 不一致,即重新设定电压选择开关使符合当地电压,以免 损坏机器或引起火灾/触电的危险。



